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PIONEERS OF MODERN
PHYSICAL TRAINING

FRED E. LEONARD

R. R. Long







PIONEERS OF MODERN PHYSICAL TRAINING

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PREFACE

The first edition of PIONEERS OF MODERN PHYSICAL TRAINING was merely a reprint in book form of a series of biographical sketches which appeared in *Physical Training* from month to month between January of 1909 and June of 1910. They were begun with no thought of completeness, and with the idea of furnishing a full-page portrait faced by a page of text. After two instalments had been prepared it was decided to lengthen the remaining articles in order to allow a more adequate treatment. Certain persons whom I desired very much to include in the list were omitted at the time owing to lack of available portraits or the necessary biographical data, or because the historical background involved had not yet been sufficiently studied. None of these reasons exists any longer, and I have therefore added the names of *Amoros*, *Hjalmar Ling*, *Brosius*, and *Betz*. Other sketches have been expanded to make the significance of the subject more apparent and to secure a better balance of parts. The *Introduction* and *Appendix* are taken from an article published in *Physical Training* for January and February of 1912 and in the *American Physical Education Review* for March and April of the same year. It is hoped that in its present form the book may serve as an introduction to the history of physical education, and commend itself to teachers of that subject who desire a manual for use in normal schools, leaders' classes, and summer schools.

F. E. LEONARD.

October, 1914.

INTRODUCTION

Since all human institutions and agencies as they exist today represent only the latest stage in a long process of growth and development, each is best understood when we turn back to the past and retrace the significant steps in its evolution to present forms. Such a study of beginnings yields many a useful clue to what would otherwise defy analysis. It gives perspective in assigning values to new solutions brought forward for old problems, and it enables one to start where others left off, profiting by their successes and avoiding their mistakes.¹ *

In ancient *Greece*² there were two strongly contrasted types of education, unlike in aim and method. The earlier Doric or Spartan type had discipline for its key-note and aimed to produce a citizen-warrior. The other and much broader type was the Ionic or Athenian, which became more and more the dominant one throughout Greece and her colonies. It regarded the individual as valuable in and for himself, and sought to promote first of all his full and free development. If we commence our review with Athens, in the fifth century before Christ, we find that each free citizen was required to provide his sons with instruction in gymnastics and music. The former trained primarily the body and the will; the latter, including literary branches

* This and following figures refer to corresponding numerals in the *Appendix*.

as well as music in the narrower sense now conveyed by the term, developed the intellect and the emotions. Thus mind and body were to be educated together, and the end was individual completeness and harmony of parts. The gymnastic exercises practised in private schools (*palestrae*) and usually given out-of-doors were little more than orderly contests in wrestling, running, jumping, and throwing the spear and the discus. Grown men met for exercise and conversation in the various *gymnasia*, state institutions maintained at public expense and administered by public functionaries. Probably by the end of this century no important Greek town, in the parent land and in the far-scattered colonies that dotted the borders of the Black Sea and the Mediterranean, was without one, at least, of these structures. At the great national festivals, which helped to bind together the politically distinct members of the Greek race, interest was centered chiefly on competitive exercises — running, jumping, throwing the spear and the discus, wrestling, and boxing — between free-born citizens, of pure Hellenic descent and untainted by crime. There were also horse- and chariot-races. These athletic contests were the only ones at Olympia, the foremost gathering of them all, and held the chief place at others where musical and literary competitions were added.

Among the *Romans*³ military training and the life of the camp furnished the only systematic bodily discipline. They were practical men, strangers to the Greek passion for beauty, and valued exercise only as it led to robust health and made capable soldiers. The Greek gymnastics never gained a foothold among them, either as a factor in education or in the form of the national

games. These had now lost their original character of sacred festivals, and the contestants were professional athletes, tempted by the rich prizes offered, usually of low birth and not averse to trickery and falsehood. The public baths, found in Rome and in every important provincial town in the days of the Empire, present at first glance a striking resemblance to the Greek gymnasia, but one much less real than apparent, and the effect of the institution on Roman life was on the whole an enervating one. Between the pan-Hellenic festivals celebrated in the stadium and hippodrome at Olympia in the time of Pericles, and those public spectacles which crowded the amphitheatre and circus of the degenerate Roman world during the first centuries of the Christian era, the contrast is even greater. The chariot races of the Circus Maximus and the combats in the Colosseum reveal a changed type of civilization and mark the lowest stages of athletic professionalism.

It was inevitable that the early Christians, living for the most part in cities and brought into close and daily contact with all the abominations of the decadent pagan society of the Empire, should exhibit a violent reaction from the prevailing luxury and sensual self-indulgence. In protest against its excesses they sometimes carried their stern self-restraint so far as to deny themselves the common comforts of life and decline to gratify those cravings of the body which are innocent and natural. Through the Alexandrian schools of philosophy they also felt the influence of that fundamental tenet of the Oriental religions which holds that evil inheres in matter, while mind or spirit is essentially divine and pure, that the flesh and the spirit therefore wage perpetual warfare on each other and

the body is an enemy to be resisted at every point. Then, too, the persecution to which many converts of the growing Church were subjected kindled an intense religious enthusiasm which welcomed martyrdom and caused pain and torment to be considered meritorious of themselves. After the persecutions ceased the self-torture of the hermit and the monk took their place as a means and measure of human excellence. Mortification of the body thus acquired the dignity of a religious exercise, while the idea of pleasure came to be closely associated with that of vice. In spite of its disastrous physical effects upon the individual and the pernicious consequences of the doctrine among the people at large, *asceticism*⁴ soon became a part of the accepted teaching of the Church and the practice of a large proportion of her leaders and adherents.

In the cities of northern Italy, and throughout southern Europe generally, the inroads of the Germanic barbarians in the fourth and fifth centuries were not followed by the complete extinction of the race of lay teachers; but in transalpine Europe, from the sixth till the twelfth century, the Benedictine *monasteries*⁵ were the chief, if not the only seats of learning, and education was almost wholly in the hands of monks of that order. Theological doctrines and religious interests absorbed human thought. Men were trained for the world to come, and the present world was deemed unworthy of attention. The soul was the one object of solicitude, and the body was regarded with contempt, so that there could be no such thing as physical training in schools conducted by the Church. The monastic discipline in all its severity was an essential part of school life.

A succession of influences, and chief among them the Crusades, operating in the eleventh and twelfth centuries, had widened the scope of human interests and produced a vague longing after knowledge which was not to be satisfied by the traditional teaching. Along with the demand for a different type and more advanced grade of instruction there arose here and there famous lecturers, who gathered about themselves great numbers of disciples. Centers were thus created to which other teachers and their followers were attracted, and this in turn led to an informal association of masters and pupils, out of which the *medieval university*⁶ developed. In Italy the long-neglected legal system of ancient Rome was studied afresh, the medical sciences were foremost in Moorish Spain, and in the regions of Europe farther north dialectic and philosophy were applied to the study of theology. Teachers were bound by superstitious reverence for authority, however, and as regards treatment of the body the influence of asceticism was still supreme. Provision for lawful amusements was rarely made in university statutes, which appear frequently to have regarded harmless attempts at pleasure with more hostility than they displayed toward actual vice and crime.

But meanwhile the hermit of early Catholic legends had been displaced as a popular hero by the knight. Military Christianity, as typified in the three orders of soldier-monks which had their origin in the twelfth century, could not fail to weaken the hold of the ascetic ideal. *Chivalry*,⁸ or the body of law and custom relating to knighthood, prevailed almost universally throughout western Europe between the eleventh and sixteenth centuries, and in its ideals of war, religion,

and gallantry was summed up the whole duty of the gentleman of that age. The system can be traced in part to various customs of the rude German tribes[†] which overran southern and western Europe in the fourth and fifth centuries, developed later under the influence of feudalism; but its final form was not received until the time of the Crusades (1096-1270), when the Church, in order to further her own designs, adopted and modified its practices. The decline of chivalry as a military system, though it began soon after the last Crusade, did not become complete until the fifteenth century. The early training of the knight stood in sharp contrast to the education imparted in the monastery schools. Running, jumping, wrestling, swimming, climbing ropes and poles and ladders, hurling stones, casting the spear, shooting with the bow and the cross-bow, wielding the battle-axe, and fencing, at first with dull wooden swords, helped to harden his body and give mastery of its powers. The most essential exercise, however, was horsemanship, including the adroit use of shield and lance, and the ability to endure the weight and overcome the hindrance of full armor. Out of the rough trials of strength and skill that were a natural occurrence whenever knights met at leisure were gradually developed the tournaments common all over Christendom in the thirteenth and fourteenth centuries, a public spectacle no less brilliant, fascinating, and characteristic of the age than were the pan-Hellenic games, or the gladiatorial shows of the Roman world.

The universities of the Middle Ages made an important contribution to the intellectual advancement of Europe, but it is not till we reach the fifteenth and sixteenth centuries, the period of the *Renaissance* and the

Reformation,⁹ that we find men escaping from a conception of the world and the flesh which associated them with the devil, and from the authority of that theological dogma which centered thought and imagination for centuries upon the rewards and punishments of a future state and meanwhile paralyzed or thwarted every effort to master the resources or investigate the phenomena of the material universe. Among the chief factors in this process of transition from the medieval to the modern world was the Revival of Learning,—that appreciative study of the Greek and Latin classics and all the long-neglected records of ancient civilization which supplied the Western nations with a new ideal of life and culture. Writers on education, influenced by their classical studies and also by the customs of chivalry, which had not ceased to shape the early training of the gentleman, began to speak in commendation of bodily exercise and recognition of its rights to a place in the curriculum, referring repeatedly to ancient Greeks and Romans as authorities or by way of illustration. A famous Italian physician, Hieronymus Mercurialis, in the first part of his treatise on the Gymnastics of the Ancients, published in Venice in 1569, sought to reproduce for his readers the Greek gymnasia and gymnastic exercises.

While the best of the Renaissance writers on education had begun to break away from authority and tradition, and with reason as a guide were groping their way toward a training better suited to the nature and present needs of man than any the past could supply, the fact that their ideas gained currency throughout all Europe, and the way was thus prepared for practical reforms, is very largely due to the powerful influence

exerted by *John Locke* and *Jean Jacques Rousseau*,¹⁰ men who belong to the seventeenth and eighteenth centuries. The former published "Some Thoughts on Education" in 1693, and the latter his "Émile," an educational romance, in 1762. Both urge the necessity of some sort of physical training in the scheme of education.

But it was not until 1774, when *Basedow*,¹¹ filled with thoughts of reform in methods of teaching and determined to found a model school which should embody his ideas and force them upon the attention of educators, opened his "Philanthropinum" in Dessau, on the Elbe north of Leipsic, that we come to the actual beginnings of modern physical training. In this private institution, open to all classes of society, bodily exercise was given a place in the daily program from the start, incorporated into the plan of instruction as an essential factor and entrusted to one of the regular teachers. The first to be introduced were the "knightly exercises,"—dancing, fencing, riding, and vaulting; then followed "Greek gymnastics," apparently nothing more than orderly contests in running, wrestling, throwing, and jumping; and before the school was closed in 1793 most of the forms of exercise advocated since that day had been employed, *i. e.*, simple games and athletic sports, gymnastics, military drill, manual labor and manual training, and school excursions.

A long list of pioneers of the new art now appeared in various parts of Europe. *GutsMuths*¹² taught gymnastics for nearly fifty years (1786-1835) in Salzmann's Educational Institute at Schnepfenthal, and published important volumes on gymnastics, games, swimming, and manual training. Outside of Berlin,

from 1810 through 1818, *Jahn*¹³ met boys and young men for exercise, beginning with a few pupils and a little portable apparatus, but later preparing and equipping an outdoor gymnasium and playground, and with the help of squad leaders handling a membership of more than a thousand. Out of this voluntary association of "turners" developed thirty years later the popular gymnastic societies (*Turnvereine*) of Germany, which now number over 11,000 and have a total enrolment of more than a million men. *Nachtegall*,¹⁴ in ~~Copenhagen, started a private gymnasium in 1799, the first institution in modern times devoted exclusively to physical training, and under his leadership Denmark became the first European state to introduce physical training into its schools as an integral part of the course and to prepare teachers of that subject by offering instruction in theory and methods of gymnastics.~~ Under the patronage of the King of Sweden *Pehr Henrik Ling*¹⁵ opened in 1814 the Royal Central Institute of Gymnastics in Stockholm, and before his death in 1839 had laid the foundation of Swedish military, medical, and school gymnastics. The last branch was developed into its present form under his son *Hjalmar*¹⁶ in the third quarter of the century. The Spanish Colonel *Amoros*¹⁷ devoted himself to teaching gymnastics in Paris from 1817 till 1848; and *Clias*,¹⁸ born in the United States, but of Swiss and French Huguenot descent, was active in three countries,—Switzerland (after 1815), England (1822-1825), and France (1841-1848). The chief work of *Spiess*,¹⁹ the father of school gymnastics in Germany, was accomplished in the years 1833-1855.

In the *United States* the different systems or sorts of

physical training which have been brought forward for trial, and the agencies which have promoted its spread, fall into three groups, centered about 1830, 1860, and the decade from 1880 to 1890. The first includes Captain Alden Partridge and his military academies²⁰; the introduction of the Jahn gymnastics and the opening of school, college, and city or public outdoor gymnasia under the direction of the German refugees *Beck*, *Follen*, and *Lieber*²¹; the attempt to provide manual labor as a system of exercise in educational institutions²²; and the earliest use of "calisthenics" for girls and women,²³ by Catharine Beecher in her schools in Hartford and Cincinnati. To the second belong the gymnastic societies formed by native Americans on the model of the German *Turnvereine*;²⁴ the building of the first college gymnasia, at Amherst, Harvard, and Yale, and the establishment of a chair of hygiene and physical education at Amherst²⁵ (see *Hitchcock*); the lectures and exhibitions of Dr. Windship;²⁶ the advocate of heavy lifting; the "new gymnastics" of *Dio Lewis*²⁷; the incorporation of military drill and instruction in colleges and universities organized under the terms of the Morrill Land Bill of 1862²⁸; and our earliest acquaintance with the exercises of the "Swedish Movement Cure" (medical gymnastics). In the third group we find the system introduced by *Dr. Sargent* at Hemenway Gymnasium of Harvard University²⁹; the organization of the American Association for the Advancement of Physical Education³⁰; the report on physical education in American colleges and universities prepared by *Dr. Hartwell* for the Bureau of Education in 1885; the systematic efforts of German-American gymnastic societies and the North American *Turnerbund* to make their

work known among native Americans (see *Brosius* and *Betz*); Dr. Wey's use of physical training with criminals and dullards at the Elmira (New York) Reformatory³¹; the starting of training courses for physical directors in Young Men's Christian Associations, first at Springfield, Mass., and later in Chicago, and the appointment of a secretary for that phase of Association activity by the International Committee (see *Roberts* and *Gulick*); the Boston Conference of 1889, and the introduction of Swedish school gymnastics into this country (see *Posse* and *Hartwell*); the opening of a number of normal schools and summer courses for the training of teachers; and the rapid spread of interest in athletic sports and active games.

The most important among these pioneers of modern physical training in Europe and America form the subjects of the twenty chapters which follow. A guide to further reading along the lines indicated in this brief summary is furnished in the *Appendix*.



JOHANN CHRISTOPH FRIEDRICH GUTSMUTHS

I

JOHANN CHRISTOPH FRIEDRICH GUTSMUTHS *

The first school in modern times to give physical training a place in its daily program seems to have been that opened by the educational reformer JOHANN BERNHARD BASEDOW (1723-1790) in 1774 at Dessau, in the German Duchy of Anhalt. He assigned to one of the teachers, Johann Friedrich Simon, succeeded in 1778 by Johann Jakob Du Toit, as a part of his regular duties the direction and supervision of the exercises of pupils. CHRISTIAN GOTTHILF SALZMANN (1744-1811), after three years of teaching at the Dessau school, withdrew to open (1784) a similar "Educational Institute" on the country estate of Schnepfenthal, on the north slope of the Thuringian Forest about ten miles southwest of Gotha. The direction of the daily gymnastic lesson and the Sunday games of pupils, entrusted in 1785 to Christian Carl Andre, was turned over a year later to JOHANN CHRISTOPH FRIEDRICH GUTSMUTHS (1759-1839), who thus became, not the first, but the fourth teacher of gymnastics in modern times in a school open to all classes of society. The pre-eminence of GutsMuths among pioneers of mod-

* Consult the *American Physical Education Review* for March, 1899 (Vol. IV., pp. 1-18) and June, 1904 (Vol. IX., pp. 89-96 and 104-107); and *Mind and Body* for January, 1911 (Vol. XVII., pp. 321-326).

ern physical training does not rest, therefore, upon priority in time, but is due rather to his long period of service — almost fifty years,— to the character and results of his teaching and the favorable impression which it made upon visitors, and to the series of volumes from his pen which formed what has been aptly called the first normal school of physical training for other teachers, and not in Germany alone, but elsewhere in Europe and even beyond its borders.

GutsMuths, son of a tanner in moderate circumstances, was born in the ancient Prussian town of Quedlinburg. In the spring of 1773 his father died, and four years later he became private tutor in the family of Dr. Friedrich Wilhelm Ritter, a respected physician in the town. For three years, beginning in 1779, he was a student at the university of Halle, pursuing courses not only in theology, to which he originally planned to devote himself, but also in mathematics, physics, modern languages, and pedagogy. Returning then to Quedlinburg, he resumed his old position in the Ritter household. In June of 1785, a year after the death of his patron, GutsMuths arrived at Schnepfenthal with the widow and two of her sons, Karl (afterwards a celebrated geographer) and an older brother. Both boys were received by Salzmann as pupils, and GutsMuths himself was persuaded to remain as a permanent assistant. By the end of the month he had taken up the duties which were discharged uninterruptedly thereafter until within a few weeks of his death, more than a half-century later. At the start he gave instruction in various elementary subjects, but especially in geography and the French language. Gymnastics was added in July of 1786, and within the next

decade he had begun to confine himself to his favorite subjects, gymnastics (until the summer of 1835), manual training, and geography. After 1802 he was swimming teacher as well. The daily exercises occupied the hour from eleven to twelve, and were usually practiced out-of-doors on a neighboring hill, where an open space under the oaks had been provided with the necessary apparatus.

Many visitors went away to spread the news of methods followed here; but even more influential was the long series of books published by GutsMuths, some of which deservedly rank as classics. They include *Gymnastics for the Young* (1793; a second edition, in 1804, was "re-written throughout and much enlarged," so as to be essentially a new work), a remarkable book on *Games* (1796; a second edition appeared the same year, and a third in 1802), manuals of *Swimming* (1798; second edition in 1833, "revised, improved, and enlarged") and *Mechanical Avocations* (1801; second edition in 1809), a *Book of Gymnastics for the Sons of the Fatherland* (1817), and a *Catechism of Gymnastics* (1818). The earliest work, our first modern manual of gymnastics, was translated, in whole or part, into Danish (1799), English (London, 1800, and Philadelphia, 1802 — wrongly attributed to Salzmann on the title page!), French (1803), Dutch (1806), and Swedish (1813). In addition to his books on physical training GutsMuths wrote numerous ones devoted to geography, and rendered an important service to educational science through the *Library of Pedagogical Literature* which he edited and published in the years 1800-1820 (53 volumes).



FRANZ NACHTEGALL

II

FRANZ NACHTEGALL *

Denmark was the first European state to introduce physical training into its schools as an essential part of the course and to prepare teachers of that subject by offering systematic instruction in theory and method of gymnastics. The leader in this movement, and its director for more than forty years, was FRANZ NACHTEGALL (1777-1847), the son of a Copenhagen tailor. His early education was received in a private school, and he had begun the study of theology in the Danish university when his father's death imposed upon him the support of himself and an invalid mother. For a time he gave private lessons in Latin, history, and geography, but the small pay necessitated such long hours that his health began to suffer. From boyhood he had been interested in forms of physical activity, and as a university student gained considerable proficiency in fencing and vaulting. Inclination, therefore, and the reading of *Gymnastics for the Young*, published by GutsMuths in 1793, started him upon what was to become a life-work. Early in 1798 he organized a gymnastic club of university students and tradesmen, and the skill displayed as their leader brought him a year later an invitation to give lessons in the private school which Court Chaplain Christiani had opened four years

* Consult the *American Physical Education Review* for June, 1904 (Vol. IX., pp. 97-99 and 107, 108).

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before, under the influence of Basedow and his followers. A rival institution, which Nachteggall had himself attended as a boy, soon secured a share of his time for the same purpose, and other schools in Copenhagen, public as well as private, followed the example of these two, so that by 1805 at least nine were furnishing instruction in gymnastic exercises to their pupils.

On the 5th of November, 1799, having definitely decided to give himself wholly to the new calling, Nachteggall opened a private outdoor gymnasium, the first institution in modern times devoted exclusively to physical training. The five pupils with whom he began had increased to 25 by the end of the year, and in the winter of 1803-04 the number reached 150, both children and adults. When in 1804 the King appointed him professor of gymnastics in the University, he had already given, for two years, lectures on the history and method of physical training, with the help of an assistant, a former pupil, to an audience made up of students there and in one of the teachers' colleges, with an admixture of military men. Meanwhile the training of military and naval cadets and the instruction in gymnastics given in schools for non-commissioned officers had also been entrusted to him, and when the King established an Institute of Military Gymnastics, by decree of August 25, 1804, Nachteggall became its first director. From this as a center the new teaching was to be spread throughout the entire army and navy, including the Norwegian regiments. Four years later civilians were also admitted to courses in the Institute, which thus became a general normal school of gymnastics, attempting to do for the schools and the people at large what it had already accomplished for the army, and to prepare

instructors for teachers' colleges and the elementary schools especially. This double function, civil and military, it continued to discharge until about 1816.

A law passed in 1814 decreed that every school in Denmark should provide grounds and apparatus for gymnastics, and that wherever the teachers were able to direct it the children should be given an hour of exercise each day, in addition to the regular schedule. Nachtegall was appointed Director of Gymnastics in 1821, his duties extending to the schools of the army and navy as well as to civil institutions; but progress in the latter was very slow until 1828. In that year another attempt to provide a general normal school of gymnastics was made, by arranging to have children from one of the elementary schools serve as a sort of model school in connection with the Institute of Military Gymnastics, whose pupils, civil and military alike, could thus be furnished practice in the actual handling of classes. Short courses for civilian teachers were also arranged, but the Institute remained a military one, nevertheless, in its main plan and purpose, and not until 1911 did Denmark possess a State Normal School of Gymnastics intended for school teachers exclusively and with a building and teaching staff of its own. The year 1828 was also noteworthy for the publication of a new law which made mandatory the introduction of physical training in all Danish elementary schools, and for the appearance of a handbook prepared by Nachtegall for their use,—the first manual of school gymnastics to be sanctioned by the government of any European country. Four thousand copies were distributed throughout Denmark at the King's expense, and it was estimated that by the close of 1830 two thousand

schools had already complied with the law. In the year following the higher schools for boys were authorized to take the same step. Most of them promptly did so, and Nachteggall issued in 1834 a second manual to meet their needs. Both books were afterwards translated into German. He also opened, at the Military Institute and with royal approval, an experimental course in gymnastics for girls, in 1838, and within another year this developed into a normal school for the preparation of women teachers.

Nachteggall resigned his position as head of the Institute of Military Gymnastics in 1842, but continued to serve as Director of Gymnastics in Denmark until his death five years later. He was not the inventor of a system of his own, but borrowed his types of exercise from Dessau and Schnepfenthal, and used the manuals of GutsMuths as a guide (a Danish clergyman, V. K. Hjorth, had published in 1799 a translation of the second volume of *Gymnastics for the Young*, i.e., the portion which constitutes a practical handbook). He was a good teacher and organizer, tactfully winning the good-will and support of leading men, skilful in accommodating himself to actual conditions, and indefatigable in his efforts to advance the work to which he had committed himself with so much devotion. Denmark owes it to him that during the first third of the nineteenth century she held the leading place among European nations in the realm of physical training. Beginning in 1884, however, the Ling or Swedish system of school gymnastics has gradually replaced the older GutsMuths-Nachteggall one in the sister state, and forms the basis of the official Danish *Handbook of Gymnastics* issued in 1899.

when not thus engaged, and later dividing his time between Stockholm and the University of Upsala. The next five years (1799-1804) he passed in Copenhagen, continuing at first his linguistic studies in the University and the Royal Library and later engrossed in the old Norse mythology. It was during this residence in the Danish capital that three years of practice in the fencing school conducted by two Frenchmen made him a master of that art, and that visits to Nachtegall's newly opened private gymnasium introduced him to the GutsMuths gymnastics.

In the fall of 1804 and near the close of his twenty-eighth year Ling returned to Sweden, to become fencing master at the University of Lund. There he remained for eight years, and meanwhile applied himself to the study of anatomy and physiology and worked out his original systems of bayonet fencing and gymnastics. Invitations to introduce the double art of fencing and gymnastics in neighboring cities in the course of the long summer vacations were repeatedly received and accepted. The condition of Sweden just at this time was a desperate one. French and Russian incursions had deprived her of territory south and east of the Baltic, and other enemies threatened on the west and in the southern provinces. Ling was always an intense patriot, eager to see his countrymen strong in body and soul and thus prepared to thwart the foe. This was the inspiring motive of his writings and his gymnastics alike. Study and experiment had taught him something of the human body and its needs, and helped him to select and apply his exercises intelligently with these needs in view. Nachtegall, in Copenhagen, had already begun to train teachers of gymnastics for the

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army and the schools of Denmark, and now Ling conceived the idea of opening in Stockholm a central training school from which all Sweden should be supplied with teachers of the new art. With this plan in mind he went up to the capital early in 1813 and handed to the recently appointed Committee on Education a written proposal for the new institution. A royal letter of May 5 formally approved the plan. Ling was made director at a fixed salary, and given a grant for the purchase of equipment and an annual allowance to cover the rent of necessary rooms. In 1814 the "Royal Central Institute of Gymnastics"—so named by the King—was ready to begin operations, and here for the remaining twenty-five years of his life Ling was busily engaged in the elaboration of his ideas. He was the author of a long series of dramatic and other poetical works, which won for him the great prize of the Swedish Academy and membership in that distinguished body. He also received the title of Professor, and was decorated by the King with the Order of the North Star. The men who assisted and followed Ling as teachers at the Institute have contributed much to the development of gymnastics in the three directions which he indicated. As one of them has said, "His greatest service to gymnastics was the attempt to give it a scientific basis, and it must therefore change and develop with every advance in the sciences upon which it rests." During his lifetime he had issued small manuals of gymnastics and bayonet fencing for use in the army, at a time when the dearth of trained teachers and properly equipped gymnasia precluded the use of any but the simplest exercises and such as required little or no apparatus. The "General

Principles of Gymnastics," a treatise begun in 1831, was published a year after his death in the incomplete and often fragmentary form in which he had left it, and possesses little present interest to any one but the student of history.

Ling's successors as director of the Central Institute, and their periods of service, have been the following: Lars Gabriel Branting (1799-1881), 1839-1862; Col. Gustav Nyblæus (1816-1902), 1862-1887; Capt. Lars Mauritz Törngren (1839-1912), 1887-1907; Col. Viktor Gustav Balck (1844-), 1907-1909; and Major Nils Fredrik Sellén (1859-), since 1909. *Branting* devoted himself chiefly to the development of medical gymnastics in accordance with the theories of his predecessor, and brought that branch to a high degree of perfection. He also worked out a terminology which with a few changes is still employed in Sweden. It was at this period, too, that the work of the Institute began to awaken interest in other countries. Two Prussian army officers, Lieutenants Rothstein and Techow, were sent to Stockholm to take the regular course of instruction in 1845-46, and Rothstein afterwards wrote extensively on the Ling gymnastics, and in 1851 became the first director of the Berlin "Central Institute of Gymnastics," founded on the pattern of the Swedish school but without its department of medical gymnastics. Many other foreigners came for visits of varying duration, and physicians, especially, were attracted by the new system, among them Doctors Eulenburg, Neumann, and Melicher of Germany, and Dr. M. Roth of London. Under *Col. Nyblæus* the course at the Institute was increased from one year to two years of six months

each, a regular course for women was opened, and in 1864 the school was reorganized into three sections, the educational, military, and medical, each with its head teacher. The first man to be put in charge of the section of school or educational gymnastics was Ling's son *Hjalmar* (q.v.). *Capt. Törngren* occupied the same position, succeeding Hjalmar Ling in 1882, and while he was director the school year was lengthened and a third year (medical gymnastics only) was added to the course. *Col. Black* had been head teacher in the section of military gymnastics since 1887. He has been an ardent advocate of outdoor and other sports for young and old, organizing societies for their promotion and editing a series of a dozen illustrated volumes devoted to the various forms. He has also done much to promote the formation and spread of popular gymnastic societies, and to make Swedish gymnastics known in other countries by accompanying selected groups of fellow countrymen who have given exhibitions at foreign capitals. In 1910 the King appointed a special committee of six to propose plans for another reorganization of the Central Institute. Their elaborate and statesmanlike report, presented two years later, recommends a great number of radical and far-reaching changes.*

* This report is summarized in the *American Physical Education Review* for March, 1914 (Vol. XIX., pp. 192-199).

of the class-room, and his country plainness, not to say roughness, of speech and manners and want of familiarity with city ways, together with his independent spirit and the lack of intimate companionship with boys of his own age hitherto, led to repeated misunderstandings. The university career, also, which followed (1796-1803, in Halle, Jena, and Greifswald), while it revealed a native capacity for leadership and a certain rugged eloquence in public speaking, was interrupted by frequent excursions on foot to various parts of Germany, and rendered stormy by constant warfare with the student clubs, whose narrow provincialism, dissolute life, and frequent dueling roused him to an almost fanatical opposition. This also brought him more than once into conflict with the academic authorities. His habits of study, too, were desultory, and few of the courses begun were completed in orderly fashion.

Now succeeded a period of quiet teaching and literary labors, during which the man gathered himself together, formed those settled convictions which became the mainspring of his future career, and showed the underlying strength and soundness of his character. For two years he was a private tutor in Mecklenburg, and afterwards spent some months at Göttingen and Jena, completing a volume of philological contributions which embodies material collected in all parts of Germany during the excursions of his university days. It seems that Jahn had hoped to obtain a footing in the university at Göttingen; but in the fall of 1806, while he was sojourning in the Harz Mountains, his plans were suddenly changed. Napoleon's incursions and his insolent treatment, which were threatening the very

existence of Prussia, had at last compelled the King to take up arms against the French. Learning that war was inevitable, Jahn immediately hastened toward the gathering army to offer his services; but he reached Jena only in time to see the last struggle and the crushing defeat of October 16, and at once joined the fleeing soldiery as a "volunteer fugitive." Frederick William's troops had proved an easy prey for the French. The great fortresses were surrendered one by one and garrisoned by the enemy's forces, the royal family fled from Berlin, and by the Treaty of Tilsit (July, 1807) Prussia lost half her territory and became virtually a mere province of France. A volume on "German Nationality," his chief literary work, which Jahn prepared for publication in the course of the two years of retirement which followed this treaty, gives forcible expression to his controlling passion for the German language, customs, and history, and his intense desire to see Germany bound together into one strong nation, able to throw off the hated foreign yoke.

Late in December of 1809 Jahn arrived in Berlin, where, as he says, love for the fatherland and his own inclination led him again to teaching. He at first received some private pupils, the next Easter entered a training school for teachers, and also began to give instruction in two schools for boys. The nine years which follow (1810-1818) mark the culmination of his career. It was the custom at one of these schools for teachers to spend some of the Wednesday and Saturday half-holiday afternoons out-of-doors with pupils of the lower classes. In the spring of 1810 Jahn began to make this his practice, meeting the boys from time to time outside the city gates for games and simple ex-

ercises like running, jumping, throwing, and wrestling, or going farther with them to the *Hasenheide*, a hilly and wooded stretch of unused land on the southern slope of the Spree valley. Older scholars were welcomed whenever curiosity and inclination tempted them to join the band, and the numbers rapidly increased from week to week. Jahn knew how to vary the exercises and make each one interesting, and the moments of rest were filled with stories drawn from history and from his own experiences. By winning the respect and love of his young companions he made harmony and discipline prevail where dissension had been the rule. The next spring an area at the *Hasenheide* was fenced in and equipped with simple apparatus for hanging, climbing, jumping and vaulting exercises. The attendance had increased to eighty or a hundred, and later in the summer it rose to two hundred. The exercises were not yet orderly or organized, but every boy was an inventor and shared the result with others, learning from them in turn. It was hardly in Jahn's nature to be systematic, and such a thing as a formal school of gymnastics was foreign to his purpose. The essential thing was the active, wholesome, common life in the open air, and especially the games, training the boys to work together in harmony, and he sought also to kindle in them a public spirit which might one day be of service to the nation. The next year new and larger grounds were laid out, the equipment received numerous additions, and the attendance reached five hundred. Jahn still worked alone, for the most part, assisted, however, by the older and more experienced pupils, whom he was now able to employ as squad leaders.

societies especially, took an active part. In carrying out their policy of repression the various governments again disbanded or put under careful supervision the gymnastic societies, and not only those directly concerned in disturbances, but others which had been well-disposed and preferred to keep the movement free from partisan politics. Toward the close of the fifties signs of life began to multiply, however. The war of France and Sardinia with Austria (1859) and uncertainty as to the future relations between France and the German states helped to rouse the slumbering societies and fill abandoned exercising grounds once more. At the first general German convention and festival, held at Coburg June 16-19, 1860, more than a thousand adult members were present, representing 139 cities and villages. Formal association into a national body was impossible as yet, but notwithstanding this a feeling of union was established and a great impulse was given to further growth. Finally, on July 20 and 21, 1868, delegates assembled in Weimar for the fourth general convention were able to bring about the definite organization of the "*Deutsche Turnerschaft*," a firm federation of all German gymnastic societies, including the Austrian Germans. During the Franco-Prussian War of 1870-71 fifteen thousand members followed their colors to the field and many gymnasia were converted into hospitals. But in spite of the temporary interruption the war brought what Jahn and his followers had looked forward to for sixty years, the final unification of Germany. Experience had shown that the gymnasium and camp had driven home the importance and value of physical effort, and that the nation would do it; and after the first

the throne of Prussia in 1840, when the old gymnastics began to revive, Jahn followed the development of the movement with interest and received hospitably its promoters who sought him out at his home; but he no longer took an active part in the work. His countrymen still hold him in grateful and loyal remembrance, as the apostle of German unity and the man who gave to the German people a love for gymnastics. The one hundredth anniversary of his birth and the fiftieth anniversary of his death were celebrated throughout the entire land. Monuments in his honor have been erected in Berlin, Lanz, Freyburg and many other places; a memorial gymnasium covers his grave at Freyburg, and in the "Jahn Museum" there numerous relics of the man and his work have been brought together for permanent preservation and display.

One sign of the quickened national and political life under Frederick William IV. was a general revival of the Jahn gymnastics. The incorporation of physical training in school programs led to the formation of societies of men and older boys, in which the bond of union was at first merely an agreement to meet for exercise at certain fixed hours; but this was soon followed by the adoption of by-laws, the appointment of boards of directors, and the fixing of definite dues. Partly as a result of excursions and exhibitions new societies sprang up everywhere, until at the close of the decade they numbered nearly three hundred. The desire for union which early showed itself was met by holding district conventions and gatherings for gymnastic exercises. But a second period of reaction set in with the revolutionary movements of 1849, in which many of the members, of Saxon and South German



FRANCISCO AMOROS

V

FRANCISCO AMOROS *

The father of physical training in France was Colonel FRANCISCO AMOROS (1770-1848), born in Valencia of Spanish parents and for more than half his life a citizen of Spain. Membership in a noble family — his father was Marquis of Sotelo — gained him admission to the army as a cadet at the age of nine, and gallant conduct and distinguished service in Algeria (1791) and during the wars of Spain as a member of the European coalition against France (1793 and 1794) brought rapid promotion through the grades of lieutenant, adjutant, and aide-de-camp to that of captain (1794). After several years in the Ministry of War he was appointed Secretary to King Charles IV. (1802), and a year later given the rank of colonel and made a member of the Council for the Indies.

Towards the end of 1806 the King established at Madrid a Pestalozzian Institute, which opened with a hundred pupils between the ages of five and sixteen. In the following year he placed Amoros at its head, as Director, entrusting to him at the same time the education of one of the princes. From the start the physical training of the children at the Institute was made a

* Reprinted, with a few changes, from the *American Physical Education Review* for June, 1904 (Vol. IX., pp. 99-102. See also, in the *Review*, pp. 108, 109).

matter of prime importance, and the efforts of Amoros in this direction met with marked success. But soon this work was violently interrupted. A popular uprising in 1808 compelled King Charles to abdicate in favor of Crown Prince Ferdinand. A few months later Napoleon appeared upon the scene, drove Ferdinand from the throne, and reduced Spain to the condition of a French dependency under his own brother, Joseph Bonaparte, as King (1808-1814). Amoros, who had sided with the old king against the son, now found himself drawn into the circle of the invaders, and was soon high in the favor of the new administration, discharging to the entire satisfaction of his superiors the duties of Minister of Police, in Andalusia, and Royal Commissioner first in four Spanish provinces and later in Portugal (1811). Then followed the fall of Napoleon and the restoration of Ferdinand to the throne of Spain (1814), and Amoros, proscribed as a rebel, was forced to join the French army in its flight across the border of his native land.

After a few months of uncertainty he seems to have made up his mind, once for all, to undertake the introduction of physical training in his adopted country, and having made the choice he threw himself into the new work with all his unusual gifts of body and mind and for thirty years held unceasingly to his course. In July of 1816 he became a naturalized citizen of France. The next year with the help of influential friends he was able to open his first (outdoor) gymnasium, at the private school of M. Durdan, rue d'Orleans 9 (rue Daubenton) Paris, not far from the Jardin des Plantes. A public exhibition of the work of his pupils given July 2, 1818, led the Minister of War to send twelve

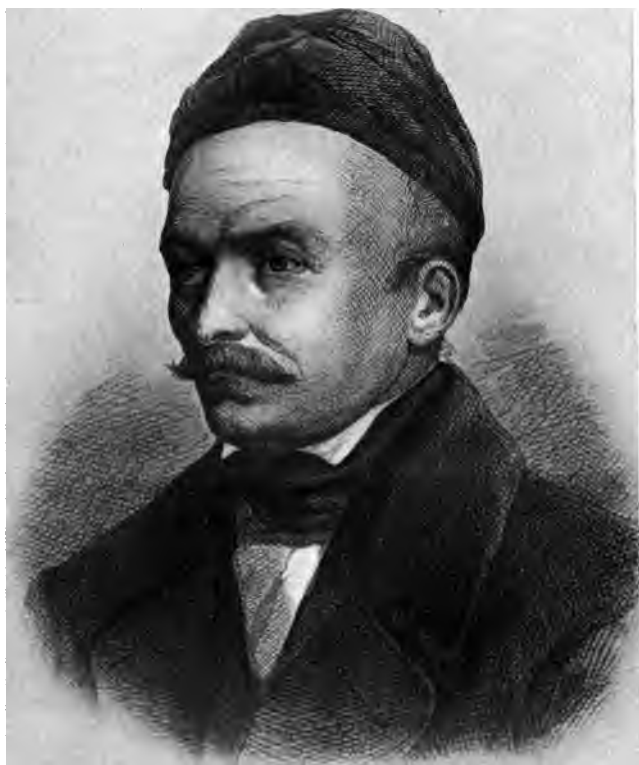
city firemen to him twice a week for a four-months' course of gymnastic training, and afterwards a number of picked men from the army were detailed for the same purpose. The next step was the laying out of a great open-air gymnasium at the Place Dupleix, in the Park of Grenelle and close to the Military School and the Champ de Mars. The plans were those of Amoros, and when the new "Gymnase normal militaire" was ready for use, in 1820, he was at once made its Director, and the sum of sixty thousand francs a year was allowed for its maintenance. The chief object in view was to train teachers of gymnastics for the army, and during four days of each week the grounds were given over to sections of the infantry regiments of the Royal Guard, and afterwards to troops of the line stationed in Paris; but in the absence of a civil gymnasium the Minister of the Interior arranged with the Minister of War for the free admission of pupils from the royal schools and colleges, for whose use, and for the private pupils of the Director, Thursdays and Sundays were accordingly reserved. At the same time a special gymnasium was provided for the city firemen, with Amoros at its head.

The next decade was one of incessant application to the tasks thus laid upon him, and yet he was able to signalize its close by the publication of a "Manuel d'Éducation physique, gymnastique et morale" (Paris, 1830), in two volumes (12°, 488 and 528 pp.), with an atlas of fifty plates containing more than three hundred figures. This work won for him a prize of three thousand francs from the Royal Academy of Sciences. In 1831 the Minister of War conferred on him the title of Colonel in the French army and made him Superinten-

dent of Gymnasia, at an annual salary of nine thousand francs. But soon afterwards the tide of success began to turn. The original allowance of 60,000 francs for the Grenelle gymnasium had been reduced to 41,500 francs in 1826, in 1832 the Chamber of Deputies reduced it still further, first to 30,000 and then to 20,000 francs, and disagreements between Amoros and the authorities finally led the government to close the institution altogether, in the last days of 1837. Meanwhile, however, he had opened (1834) a new "Gymnase civil orthosomatique" in Rue Jean-Goujon, just off the Champs-Élysées and near the present Grand-Palais des Beaux-Arts. Here for fourteen years longer he continued to teach, and in 1846 and 1847 was still meeting non-commissioned officers for courses of six months' duration, after which they returned to their regiments to act as instructors there. On the 8th of August, 1848, the year in which a second and revised edition of the Manual appeared, he died in Paris, and was buried in the Cemetery of Montparnasse. Delegates from the French gymnastic societies and large numbers of teachers of gymnastics assembled at that spot in 1880 to celebrate the 110th anniversary of his birth (February 19, 1770), and erected a monument to mark his grave.

When one recalls the advanced age (forty-four) at which Amoros undertook a new work in the midst of a strange people, and the disturbed political conditions in France between the downfall of Napoleon and the Revolution of 1848, his large measure of success becomes all the more remarkable. He laid the foundation of French military and school gymnastics, and his Manual remains to-day one of the best on its subject. His

system, although it can be traced to the influence of Pestalozzi, displays much originality. He devised a great variety of apparatus, made much of singing in connection with exercise, and always emphasized the moral effects to be secured by physical training properly applied. Former pupils and associates of his, Col. d'Argy and Napoléon Laisné, were instrumental in founding (1852) the Military Normal School of Gymnastics at Joinville-le-Pont, on the Marne near Paris, and there his influence continued to be felt. For years it supplied not only the army but many elementary and higher schools with teachers.



PHOKION HEINRICH CLIAS

VI

PHOKION HEINRICH CLIAS *

Although his influence has not been so far-reaching as that of GutsMuths, Nachteggall, Ling, and Jahn, CLIAS (1782-1854) nevertheless deserves honorable mention for his ability as a practical gymnast, his efficiency as a teacher, and the important service he rendered as a pioneer of physical training in three European countries. His father had emigrated from Switzerland in 1770 to settle in what were then the English colonies in North America, and after serving as an officer in the War of Independence had left the army to enter business in Boston, where the boy was born. The mother, descended from an old French Huguenot family, died soon afterwards, and the father in 1791, while he was on the way to Holland with his two sons, to place them in a famous school in Gröningen. The younger Clias, finding school life irksome, ran away after a few years, became cabin boy on a Dutch vessel, fell into the hands of the English as a prisoner of war (1803), and upon his release led a wandering life in Holland and Northern Germany until 1809, when he married the daughter of a wealthy citizen of Oldenburg, near Bremen. The death of his wife the next year

* Consult the *American Physical Education Review* for June, 1904 (Vol. IX., pp. 102-104 and 109, 110).

was followed by his removal to Berne, in his father's native land.

In 1814 Clias, who had meanwhile become an officer in the Swiss light artillery, introduced such exercises as vaulting, swimming, and wrestling among his troops in the hope of thereby keeping them out of mischief and at the same time developing their efficiency. The following winter he applied himself to preparation for what he had determined to make his future calling, and in the spring of 1815 obtained permission to give free instruction in gymnastics three hours a week to boys in the orphan asylum at Berne. His success here and with his troops led the city authorities to confer the title Professor of Gymnastics and Riding Master at the Academy. The number of his pupils now steadily increased, and teachers trained under him found employment in various Swiss cantons. A small manual of gymnastics, written in German, was published in 1816 and shows his indebtedness to the writings of GutsMuths.

Attempts to gain a footing in Paris in 1817, and again two years later, proved unsuccessful; but upon returning to Switzerland and his work at Berne he was given an opportunity to test the value of his system upon three companies of light riflemen, and this experiment attracted the attention of some English officers. As a result of their reports and of letters sent home by the English minister, he was induced to go to London in 1822. The reception accorded to him there was most flattering. The King gave him the rank of captain and made him superintendent of physical training in the royal military and naval schools, and he also taught in the Charterhouse public school and in numerous pri-

vate families; so that in 1823 the number of his pupils is said to have been no less than fourteen hundred. A French version of his manual, published in Paris in 1819, had been received with some favor, and an English one which now appeared ("An Elementary Course of Gymnastic Exercises," London, 1823) soon reached a fourth edition (1825). In the latter year he was struck by a falling pupil and so severely injured that it became necessary to go into retirement for a time. He therefore left England and returned to Berne.

It was not until 1841 that Clias emerged again from comparative obscurity. The practice of medical gymnastics, which he had continued throughout the interval, drew him then across the French border, to Besançon, and there in spite of his almost three score years he was soon busily engaged as teacher of gymnastics in various city schools, at the normal school, and among the soldiers of the garrison. An appointment (1844) to the coveted position of Superintendent of Gymnastic Instruction in the elementary schools of Paris brought another brief period of satisfied ambition, terminated by the Revolution of 1848. Returning once more to Switzerland he spent his last years among the scenes of his earliest successes and retained to the very end his active interest in gymnastics.



ADOLF SPIESS

VII

ADOLF SPIESS *

In Germany there is no imperial bureau of education; but though each of the twenty-six states manages its own school affairs independently, there is general uniformity in the type of physical training introduced everywhere into both elementary and secondary schools. This differs widely in its nature from Jahn's work in the outdoor gymnasium near Berlin, and reflects instead the influence exerted by the example and teaching of ADOLF SPIESS (1810-1858). Spiess was a native of the Grand Duchy of Hesse and born in Lauterbach, a town about thirty miles east of Giessen. His father, a clergyman, accepted soon afterwards a pastorate at Offenbach, across the Main from Frankfort, and in the private school which he also opened there and conducted on Pestalozzian principles the boy received his early training. Gymnastic exercises as taught and described by GutsMuths formed part of every day's program, and there were weekly excursions with teachers and dancing lessons in the winter months. The Jahn gymnastics were later introduced and in 1824 some of the boys organized a little society for regular practice outside of school hours. As a student of theology (1828-1831) in the universities of Giessen, Halle, and

* Consult *Mind and Body* for November, 1904 (Vol. XI., pp. 217-223).

Berlin, Spiess became proficient in the art of fencing and displayed skill in all forms of physical activity. Music and drawing, too, for which he possessed both taste and talent, absorbed a portion of his leisure. Excursions on foot took him to Schnepfenthal, where as a schoolboy he had already met GutsMuths, and to the town where Jahn was now living in retirement. During the few months in Berlin he saw and learned many new exercises in the private gymnasium opened there by Eiselen, a former pupil and assistant of Jahn's. Upon his return to Giessen in the spring of 1830 he began to give regular instruction in gymnastics, first to a dozen boys in a garden, and then, as interest grew, to nearly one hundred and fifty in one of the city parks. Already he was modifying the traditional method by gathering the entire number into one band at the commencement of each period for various simple exercises performed in rhythm as they stood or marched, or for running and jumping under the leadership of a single teacher.

Early in October of 1833, after a year and a half of private tutoring, Spiess left Germany for Switzerland, to accept a position as teacher of history, singing, and gymnastics in the elementary school of Burgdorf. The fifteen busy and fruitful years (1833-1848) which he spent in this foreign land, first in Burgdorf and then for four years in the city schools of Basel, constitute perhaps the most important period in his career. In May of 1848 he returned to Germany and to the Grand Duchy of Hesse, to undertake the task of introducing gymnastics into the schools of his native state, beginning with the higher schools and the elementary schools of such communities as were prepared to take the step

at once. He was also to train the requisite teaching force, and afterwards to superintend their work. Model lessons were immediately begun with classes of boys and girls in Darmstadt, the capital city, and teachers from all parts of Germany, and even from beyond its borders, came thither from time to time during the next few years to become familiar with his method and many of them to receive practical instruction under him. He also visited many places in Hesse in the interest of physical training, and conducted two formal courses for teachers, the first in Darmstadt and the second in Oldenburg. Failing health made it necessary to interrupt his hitherto unceasing activity in the summer of 1855, and three years later his career was brought to an untimely end by disease which had developed in the lung injured during a fencing bout in his student days at Giessen.

The chief service which Spiess rendered to physical training in Germany, and wherever German influence has been felt, was the attempt to make it a part of the school life. He believed that the school should concern itself with the whole life of the young, physical as well as mental, and that gymnastics, recognized by the state as a means of education, should be thoroughly incorporated and treated on an equality with other branches of instruction and discipline, enjoying the same rights and conforming to the same pedagogic principles. Those who teach the subject should be educators by profession, and closely identified with the life of the school, receiving their training in this branch, as in all others, at the normal schools and universities, or in part at institutions intended for that purpose exclusively. In elementary schools instruction was to be in the hands

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of the grade—or class—teacher, and in higher schools there should be special teachers of gymnastics, just as in the case of mathematics, or languages, or science. The exercise material must be arranged in progressive steps suitable for the different school grades, and a series of manuals prepared to fit the different conditions and needs in country and city schools, and in elementary and higher schools for boys and girls.

In preparation for the process of sorting out and distributing to each sex and age appropriate forms of exercise Spiess thought it necessary first of all to collect, analyze, and classify the whole mass of possible positions and movements of the body. This he endeavored to do in his "System of Gymnastics" (1840-1846), but without seeking at the same time to separate the useful from that which is unessential or undesirable. The book is not intended, therefore, as a practical guide for the teacher. That function was reserved for his second work, the "Manual of Gymnastics for Schools" (1847 and 1851), which has been a mine of instruction and suggestion for authors of later manuals. Here he leads gradually from the simplest exercises to the most difficult combinations, pointing out what material is to be used for each sex and age, and explaining the method to be pursued during the lesson hour. He devised new forms of apparatus on which the whole class, or a considerable fraction of it, could work at once under the teacher's eye and at his command. The "free exercises" and the "class exercises in marching" which he elaborated were a fresh contribution to the stock of German gymnastics and with the simpler exercises on apparatus which he introduced supplied material for girls and younger boys. His fondness for music is

doubtless responsible for that rhythmical arrangement of the free exercises which has continued to be so conspicuous a feature in the teaching of his followers ever since.*

* For information regarding school gymnastics as carried on in Germany today see *Mind and Body* for June, 1904 (Vol. XI., pp. 81-89).



HJALMAR LING

VIII

HJALMAR LING*

TO HJALMAR FREDRIK LING (1820-1886) Swedish school gymnastics is largely indebted for its present form, and the school gymnasium for the nature and arrangement of the equipment now in common use in Sweden. He also made it possible to introduce physical training generally in the elementary schools and in schools for girls. The only surviving son of Pehr Henrik Ling, he was born in Stockholm April 14, 1820, received an education equivalent to that given in the Swedish secondary schools, completed the course at the Central Institute of Gymnastics (1842), and was installed as teacher there in 1843, devoting himself to school and medical gymnastics under Branting's direction and studying anatomy under Dr. P. J. Liedbeck. In 1854, at the suggestion of Carl August Georgii, another teacher, he went to Paris to spend the better part of a year in study there, paying particular attention to anatomy, both human and comparative, but attending also Claude Bernard's lectures on experimental physiology and the clinics at the Hôtel Dieu, and meanwhile acquiring a thorough knowledge of the French language and literature. During this same period he also paid

* Reprinted, but with changes and additions, from an article in the *American Physical Education Review* for December, 1904 (Vol. IX., pp. 238, 239).

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two long visits to Berlin, to assist in introducing the Swedish method of medical gymnastics at the institutions of Doctors Neumann and Eulenburg, and took advantage of the opportunity to familiarize himself with the German language. From Paris he returned to Stockholm, became head teacher under Branting in 1858, and upon the reorganization of the course in 1864 was placed at the head of the section of school gymnastics. This position he continued to fill for eighteen years,—until his retirement on a pension in September of 1882. For some years he was also in charge of the physical training in one of the city's higher schools for boys (the *Nya Elementarskola*).

Following closely the ideas of his father, and with the sole thought of completing the latter's work, he devised new forms of apparatus adapted to the needs of the school and so arranged them that large numbers could exercise at the same time, in this way greatly increasing the number of useful exercises and bringing them all within the reach of every pupil. Then collecting a mass of gymnastic material he selected the most suitable exercises and arranged them in groups according to the effects produced upon the individual, providing further for an orderly progression in each group, and combining these into a complete lesson-scheme—the original “day's order.” It was now possible to assign to different ages and degrees of ability, and to the two sexes, the appropriate material from the graded series of exercises, so that the benefits of gymnastics could be extended to girls and younger boys.

Hjalmar Ling published two pamphlets intended primarily as guides for his students at the Central Institute, and in 1866 a work on Kinesiology (*Rörelselära*)

or the science of bodily movements. He also helped to start the Swedish periodical devoted to physical education (the *Tidskrift i Gymnastik*), and for ten years (1874-1883) was one of its associate editors. Although not a clear writer, he was a deep thinker and an industrious compiler, familiar with the whole range of gymnastic literature, German, French, and English, as a glance at the pamphlets just mentioned will show. He left behind a carefully arranged collection of nearly two thousand pen-drawings of positions and movements used in gymnastics, made by himself. These are preserved in the library of the school, and about a quarter of the entire number appear in a book since published with the help of a gift from Mrs. Mary Hemenway, the founder of the Boston Normal School of Gymnastics ("En Samling Gymnastiska Ställningar och Rörelseformer." Stockholm, 1893). The younger Ling died March 9, 1886, and was buried near his father at Annelund, a few miles northwest of Stockholm.

It is a strange but widely prevalent misconception which looks upon Swedish school gymnastics as made up entirely, or for the most part, of exercises performed without apparatus. On the contrary, the visitor to Sweden would find lessons of that sort given only in small and remote settlements, where poverty or the indifference of local authorities has prevented adequate provision in the matter of rooms and equipment. As a rule in the larger towns and in cities like Malmö, Gothenburg, and Stockholm, and especially in the newer school buildings, elementary and secondary alike, one finds separate halls for the gymnastic lesson as ample in size and an amount and variety of apparatus as great as anywhere in Germany or the United States, and

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there is often a skilful arrangement of equipment and an intelligent adaptation of means to ends well worth the careful study of teachers in other countries. It is Hjalmar Ling's great service that he sought first of all to analyze the conditions of school life and the needs of the growing child, and then to devise forms of exercise, to select, invent, and arrange apparatus, and to elaborate a lesson plan which should meet these conditions and needs efficiently and with the greatest economy of time and effort. Opinions may differ as to the merits of particular details in the system he helped to perfect, but his method of approach to the problem deserves ungrudging commendation.*

* For detailed information regarding school gymnastics as carried on in Sweden today see the *American Physical Education Review* for March, 1901 (Vol. VI., pp. 1-13), and *Mind and Body* for July, 1904 (Vol. XI., pp. 105-111).

Like many another student, Follen had come back from the war filled with ideas of moral and social reform. In place of the provincial student clubs, with their carousing and dueling, he desired to see the entire student body united into one Christian brotherhood, settling all disputes in accordance with the principles of right and justice. The purity of his own life and the moral greatness of his character, the eloquence with which he urged his views, and his confident enthusiasm soon won a following of like-minded friends in whose eyes he took on the dignity of a very prophet. The violent opposition of the existing clubs, whose primacy was threatened by a new association organized late in 1816 under Follen's leadership, led to many challenges; and lest his refusal should be attributed to cowardice he took part successfully in a number of stubbornly contested duels against some of the best swordsmen in the university. Looked upon with suspicion by the authorities on account of their liberal tendencies, and hated and proscribed by a majority of the students, who nicknamed them "Blacks" from the dark clothing they affected and their somber demeanor, the reformers became more and more extreme and uncompromising in their attitude. Their plans already contemplated a great Christian republic formed of freed and united Germany. Tyranny was to be met with resistance, and Follen now taught that armed insurrection and even perjury and assassination were justified when other measures failed in the struggle for popular freedom. Development of the physical powers formed an essential part of the program of the Giessen "Blacks." In the summer of 1816 a gymnastic society was formed, which enrolled boys in the secondary school, young merchants and oth-

ers, as well as university students. Here again the leadership fell to Follen, who is described as an excellent gymnast, a skilful hand with the broadsword, and a powerful swimmer. A book which Jahn and his older pupils had published that spring was employed as a guide and Jahn's rules formed the basis of order during the exercises.

Upon completing his courses in jurisprudence Follen remained at the university as *Privat-docent*, studying at the same time the practice of law in his father's court. Early in the fall of 1818 he undertook the cause of several hundred communities in the province of Upper Hesse who desired to remonstrate against a government measure directed against the last remnant of their political independence, and drew up a petition to the Grand Duke in their behalf. It was printed and widely circulated, and aroused public opinion to such a pitch that the obnoxious measure was repealed; but it also brought upon its author such unrelenting hatred on the part of the influential men whose selfish plans were thereby thwarted that any thought of a further career in his home city became impossible. He therefore accepted an invitation to lecture as *Privat-docent* in the University of Jena. An attempt to force upon the students there his radical views regarding moral and political reform excited the opposition of all but a small minority. Former friends, even, were alienated by his stern, intolerant attitude, and by the charge of weakness or cowardice with which he met dissent from the extremities to which he pushed his principles. One of the small handful who remained faithful was Karl Sand, whose murder of the German reactionary writer Kotzebue on March 23, 1819, was the logical outcome of Follen's

teaching, acting upon a mind unbalanced by fanatical zeal in the cause of popular liberty. To the authorities all student associations at once became objects of suspicion. Although repeated examinations yielded no legal evidence of Follen's complicity, the authorities forbade his lecturing longer at Jena, and at his home, also, he found himself a proscribed man.

Learning that the government intended to send him to prison, he left Giessen for Strasburg in the winter of 1819-20 and the next fall became professor of the Latin language and of universal history in the evangelical college at Chur, in Switzerland. This position he resigned the following summer to accept an appointment as public lecturer on jurisprudence in the university at Basel. During the next three years the cantonal authorities received and refused repeated requests from the allied sovereigns of Austria, Russia, and Prussia demanding that Follen be surrendered to them for trial on the ground of complicity in revolutionary movements. Finally these communications became so threatening, enforced as they were by letters from various other Swiss cantons, which strongly advised compliance with the demand, that further resistance was evidently unwise. Follen, therefore, left Basel secretly, traveled by mail-coach with a false passport to Paris, engaged passage for the United States from Havre a few days later, and after a voyage of more than six weeks reached New York City on December 19, 1824.

In Philadelphia, through General Lafayette, he soon made the acquaintance of Professor George Ticknor, whose own efforts, seconded by those of other influential friends, led to his settling in Cambridge a year later as the first teacher of the German language at Harvard

University. Early in the spring of 1826, only a few months after his arrival, he was also introducing the Jahn gymnastics among the students, at first fitting up one of the unoccupied common halls on the ground floor of University Hall for the purpose and later superintending the equipment of an outdoor gymnasium on the Delta, the enclosure where Memorial Hall now stands. In the fall of the same year a similar outdoor gymnasium was opened to the public in Washington Gardens, in Boston, at the corner of West and Tremont Streets, opposite the Common. The committee of citizens in charge of this project had employed Follen to superintend the erection of suitable apparatus and become the principal instructor, and authorized him to engage an assistant. He resigned his position at the Boston gymnasium early in the summer of 1827, and the title "Superintendent of the Gymnasium" at Harvard is given him only in the catalogue for 1827-28, which also contains the last reference to "gymnastick exercises." In 1830 he was advanced to the professorship of the German language and literature, three friends having guaranteed a portion of his salary for five years. The appointment was not renewed at the end of that period, and his connection with the university therefore came to an end.

He had become interested meanwhile in the newly formed Anti-Slavery Society, and at one time served as a manager of the Massachusetts branch. As early as the winter of 1826-27 he also formed the acquaintance of Dr. William Ellery Channing, and decided to prepare himself for the ministry with the assistance of that distinguished Unitarian clergyman. In the summer of 1828 he was regularly admitted as a candidate, though

X

CHARLES BECK *

One of the most important and successful educational innovations of its time was the *Round Hill School* (1823-1834) at Northampton, Mass. It occupied the site of the present Clarke School for the Deaf, and the founders were Joseph Green Cogswell and George Bancroft, both Harvard graduates and tutors, who had also received their doctor's degrees (Ph.D.) at Göttingen, in Germany, and had traveled extensively in that country and elsewhere in Europe. The prospectus, issued in June of 1823, states that "we would also encourage activity of body as a means of promoting firmness of constitution and vigor of mind, and shall appropriate regularly a portion of each day to healthful sports and gymnastic exercises." In a descriptive circular dated March 25, 1826, they claim that they "were the first in the new continent to connect gymnastics with a purely literary establishment." "It may be impossible," they say, "to engraft on any modern nation a system of physical education corresponding to that which prevailed in ancient Greece. But something must be done. . . . We are deeply impressed with the necessity of uniting physical with moral education; and are particularly favored in executing our plans of connect-

* Consult *Mind and Body* for September, 1905-February, 1906 (Vol. XII.), especially pp. 196-198, 217-223, and 284.

ing them by the assistance of a pupil and friend of Jahn, the greatest modern advocate of gymnastics." The man here referred to was CHARLES BECK (1798-1866), a German refugee whose friendship Follen had enjoyed during his three years at Basel and who had accompanied him in the flight from Switzerland to America.

Beck was born at Heidelberg. His father, a merchant, died when the boy was still young, and his mother afterwards became the wife of Wilhelm De Wette, professor in the University of Heidelberg. In 1810 the family removed to Berlin, whither De Wette had been called to fill the chair of theology in the new Prussian university. There, as a student in one of the secondary schools, Beck soon came under Jahn's influence, began to frequent the outdoor gymnasium in the Hasenheide, and owing to his natural robustness of body, and the enthusiasm with which he applied himself to the exercises, developed more than usual proficiency in all the arts of the "Turners." After the assassination of Kotzebue by Karl Sand in 1819, De Wette, who had long been a friend of the Sand family, wrote a letter to the mother, in which he endeavored to console her with the thought that her son's act, though wicked, arose from a mistaken notion of duty. The Prussian authorities, upon learning of this letter, accused the eminent teacher of seeking to excuse the crime, and in token of their displeasure deprived him of his chair and even banished him from the kingdom. After several years in retirement he accepted, in 1822, the professorship of theology in the University of Basel, and passed the remainder of his life in that city. Beck, meanwhile, had become an accomplished classical scholar at the University of Berlin. He afterwards studied theology, was

ordained to the Lutheran ministry at Heidelberg in 1822, and the next year obtained his doctor's degree in theology from the University of Tübingen. He had been active in the movement for a true Christian association of all students, and finding that his republican sentiments stood in the way of a successful career in Germany, he, too, removed to Switzerland, and joined the rest of the family in Basel, where he found an opportunity to teach the Latin language and literature. In the late fall of 1824, convinced that even this asylum was no longer free from danger for Germans known to cherish liberal opinions, he left Switzerland for Paris, a few days in advance of Charles Follen, and sailed with the latter from Havre for New York City on the 5th of November. Both men went to Philadelphia a few weeks after their arrival in this country, and were soon busily engaged in the study of English. Through General Lafayette, who was then revisiting the United States at the invitation of Congress and receiving everywhere a welcome which gave to his movements the character of a triumphal procession, they made the acquaintance of Professor George Ticknor, of Harvard University. The latter's letter to George Bancroft, to whom De Wette had already written recommending his step-son, secured for Beck an immediate appointment as instructor in Latin and gymnastics at the Round Hill School, and by the middle of February, 1825, he had left Philadelphia to take up his new duties in Northampton.

Of the nature of the outdoor gymnasium which he was soon directing, and the work done in it, not much direct evidence has come down to us. One former pupil writes that "The regular exercise of gymnastics was upon the plateau just below the hill, where gymnastic ap-

pliances, then freshly introduced from Germany, were in abundance." According to another "Round Hiller": "A large piece of ground was devoted to the purpose and furnished with all the apparatus used in the German gymnasia. The whole school was divided into classes, and each class had an hour three times a week for instruction by Dr. Beck." A newspaper article refers to the hours from five to seven in the afternoon as set apart for "exercise and amusement. At this time the classes in gymnastics have their instruction, when the weather permits." Indirect proof that the Round Hill "gymnasium" was only a miniature Hasenheide is abundantly furnished by the "Treatise on Gymnasticks, taken chiefly from the German of F. L. Jahn," a translation of the latter's book of 1816, which Beck completed and turned over to the publishers in January, 1828. In the preface he tells us that "The school of Messrs. Cogswell and Bancroft in Northampton, Massachusetts, was the first institution in this country that introduced gymnastick exercises as a part of the regular instruction, in the spring of 1825. Since that time the interest for this branch of education has been rapidly increasing, and frequent inquiries have been made respecting a subject much esteemed for its expected salutary effects, but little known as to its particulars. . . . Wishes were expressed to me, by several of the most zealous and able friends and advocates of physical education, to translate a work which would be suitable . . . or compile one. . . . I did not doubt to which of the two ways proposed to give the preference."

Beck left the Round Hill School in 1830, to take part in establishing another boys' school, in Phillipstown, on the Hudson River opposite West Point. Two years

XI

FRANCIS LIEBER *

A third German refugee who assisted in the first introduction of the Jahn gymnastics into America was FRANCIS LIEBER (1800-1872), Follen's successor at the Boston Gymnasium in the summer of 1827. Lieber was born in Berlin, the tenth among twelve children of a dealer in ironware. In 1811 he became acquainted with Jahn at the Hasenheide outdoor gymnasium. Although too young to join his older brothers in the first campaign of the War of Liberation, upon Napoleon's return from Elba he entered (1815) a volunteer regiment of infantry, took part in the battle of Ligny, was severely wounded at Namur, and later suffered from a prolonged siege of typhus fever in the hospitals at Aix-la-Chapelle and Cologne. After his return home he became one of the most ardent and tireless of Jahn's pupils, accompanying him on the month-long excursions to the Island of Rügen in 1817 and to Breslau the following year.

In July of 1819, a few days after Jahn's arrest, Lieber was also seized as an enemy of the state. After four months in prison he was allowed to go free, but forbidden to study in any Prussian university. The universities of Heidelberg and Tübingen also refused him admission, but he met with better success at Jena, where he re-

* Consult *Mind and Body* for September, 1905-February, 1906 (Vol. XII.), especially pp. 253, 254, 281-284, and 286, 287.

ceived his doctor's degree (Ph.D.) in 1820. He afterwards studied for brief periods in Halle and Dresden (1821). The Greeks had risen up against their Turkish oppressors in the spring of 1821, and in December of that year Lieber joined at Marseilles a band of Philhellenes — men who intended to give their services in the cause of freedom to a foreign race, since the reaction at home left no opportunity there for patriotic endeavor. They landed in southern Greece on the 21st of January, 1822; but the next two months were full of misery and bitter disillusionment. They were starved, robbed of their horses, compelled to sell clothing, watches, and even their arms to procure money, and met at every step with cowardice, incapacity, and lying on the part of the natives. Lieber, returning in a small boat to a town on the east coast of Italy, reached Rome about the first of June, and spent the next year as private tutor in the family of Barthold Georg Niebuhr, the celebrated German historian, at that time Prussian ambassador at the Papal Court.

The Prussian king, and later the minister of police, had assured Lieber that no further persecution need be feared in his own country, and for some months after his return to Berlin, which he reached in August of 1823, it seemed as though all was well. But in time it appeared that every movement was watched by the police. Thrice summoned as a witness before the court charged with the investigation of revolutionary plots and once kept in prison for months because of his refusal to give information, he foresaw the fate that awaited him if he remained longer in Germany, and began to take steps looking toward a career in some foreign land. Lessons in English were begun in February of 1826, and among

other things he secured from Major-General von Pfuël, in charge of a swimming school in Berlin, a testimonial as to his skill in that art and his ability to conduct a similar institution with success. When all was ready he left Berlin, May 17, 1826, and ten days later reached London. Although he passed a year in the English metropolis, supporting himself by private instruction in German and Italian, Lieber's thoughts were soon turned from this uncertain means of livelihood to the possibility of a career in the United States. As early as August his diary contains this entry: "Mrs. Austen, the authoress, introduced me to Mr. Bentham, and to Mr. [John] Neal, an American; so perhaps I may go to America." The *American Journal of Education* for November of 1826 quotes from a recent letter of this same John Neal, who was actively interested in the outdoor gymnasium opened in London by still another German refugee, and reprints the enclosed proposals of Lieber for the establishment of a gymnasium and a swimming school in this country, and a certificate received by him from Jahn under date of August 1 of that year.

On April 13, 1827, in response to an invitation just received, Lieber wrote accepting a position as Follen's successor at the Boston gymnasium, and agreeing to establish a swimming school in that city. He landed in New York City June 20 of the same year, and proceeded at once to the scene of his new duties. The swimming school seems to have proved a successful venture from the start and was still in existence at least as late as the season of 1832. The popularity of the gymnasium, on the other hand, soon waned. From a sketch of the life of its treasurer we learn that about four hundred had attended during the opening term, "but no talent could

keep the gymnasium alive after the novelty had ceased, and some of the gymnasts had been caricatured in the print shops. The institution lingered about two years, when, only about four gymnasts remaining," its accounts were closed. Lieber's own ideas regarding the nature and means of physical training are preserved for us in two articles contributed by him to the *American Journal of Education* of August, 1827 (Vol. II., pp. 487-491), and the *American Quarterly Review* of March, 1828 (Vol. III., pp. 126-150).

A testimonial from Niebuhr, and his own force of intellect and character, had secured for Lieber at once a very cordial reception on this side of the Atlantic. At the close of his first season at the swimming school he turned with great energy to literary labors, and soon made up his mind to edit an encyclopædia, modeled after a famous German work but adapted to English readers and supplied with numerous additional articles by distinguished American contributors. The first volume of the new "Encyclopædia Americana" appeared in 1829, and the thirteenth and last in 1833. It proved a successful venture financially and brought him also the acquaintance of prominent men in all parts of the country. In September of 1833 he moved from Boston to Philadelphia, charged by the trustees of the Girard Fund with the preparation of a plan for the college of that name. Then for twenty-one years, beginning in 1835, he was Professor of History and Political Economy in South Carolina College, at Columbia. In 1857 Columbia College in New York City elected him Professor of History and Political Science, afterwards transferring him to the chair of Constitutional History and Public Law in its Law School, and here he continued in active serv-

ice until his death, in 1872. As a publicist he rose to the very highest rank. At President Lincoln's request he drew up the "Instructions for the Government of Armies of the United States in the Field," published by the War Department in 1863, and during the Civil War his advice was repeatedly sought by leading statesmen on matters of public and international law.



DIO LEWIS

XII

DIO LEWIS *

In the third and fourth decades of the nineteenth century four different systems of physical training had been brought forward for trial in the United States — the drill and discipline of the military academy, the Jahn gymnastics, manual labor on the farm or in the shop, and “calisthenics” for girls and women. The claims of each were pressed by enthusiastic advocates, and there was no lack of imitators of the educational institutions in which each had first become incorporated; but for various reasons not one of the four was generally adopted or won for itself more than temporary foothold. From 1835 till 1860, though educators were increasingly alive to the importance of physical training, no one appeared with anything that seemed more likely to meet the conditions and needs of the time. Then came Dio LEWIS (1823-1886) with his “new gymnastics for men, women, and children,” something definite and practical. His contagious enthusiasm created a wave of popular interest that spread to all parts of the country, and the “Normal Institute of Physical Education,” which he opened in Boston in the spring of 1861, was the first attempt in America to prepare teachers of a subject whose right to a place in the school curriculum had long been

* Consult the *American Physical Education Review* for June and September, 1906 (Vol. XI., pp. 83-95 and 187-198).

conceded. Although his so-called "system" was not of a sort to survive for many years the loss of the founder's energetic leadership, yet he prepared the soil for the broader and more substantial type of work of a later day.

Lewis came of vigorous Welsh stock and was born on a farm in Cayuga county, New York, within a few miles of Auburn. An older brother says that at the age of twelve, when he left school, he "was as large and mature as ordinary boys of fifteen. His mind was remarkably active; so were his movements. He could do anything he desired to do with more rapidity than any person I ever knew. When accustomed to committing to memory he could read a page in a book once, close the book, and repeat it all. He had an investigating, inquisitive mind. He liked miscellaneous reading, but did not relish digging into study. He learned a great many facts but did not read many books thoroughly. He was enthusiastic in everything in which he engaged. He developed as a child a talent for declaiming, even before he could read much, and as a youth he engaged in debates and talked on temperance." After six months in a cotton factory and about two years in another where he worked at polishing hoes, axes, and scythes on an emery wheel, he began teaching school near home. When he was eighteen "he went to what was then Lower Sandusky, now Fremont, Ohio, and organized a select school. Here he began the study of Latin and Greek, and the classes which he soon formed in them, as well as in algebra and geometry, kept him hard at work with his own studies in order to keep well ahead of his pupils." A severe and prolonged attack of ague compelled the young teacher to give up his work in Fre-

mont at the end of a year, and he did not return to it. Having made up his mind to study medicine he now entered the office of the physician at the Auburn State Prison, with whom he remained nearly three years, and in 1845 went to Boston and spent some time in the medical department of Harvard University. Without completing the course there he began the practice of his profession at Port Byron, not far from his home. Won over to the new system of homeopathy by his partner, he established himself in Buffalo in 1848 and a little later began to edit a monthly publication called *The Homeopathist*. The honorary degree of doctor of medicine was conferred upon him in 1851 by the young Homeopathic Hospital College of Cleveland.

A year after his removal to Buffalo, Lewis married the daughter of a physician whose country residence was in the neighborhood of Port Byron. Three of her sisters had died of consumption, and in the fall of 1851 she herself began to exhibit unmistakable symptoms of the same disease. Her husband, who was already urging in his medical journal the importance of preventive measures, at once undertook the treatment of her case by hygienic means. For a time they appeared to be successful; but in the fall of 1852 his wife's cough reappeared, and he thereupon determined to give up his practice and go south with her for the winter. Early in January they reached Fredericksburg, Virginia. It was not in the man's nature to remain idle, and he was soon talking on health subjects to pupils in the schools. To identify himself with a cause which had excited his interest ever since boyhood he now joined "The Sons of Temperance," and "meeting only indifference to his appeal for the admission of women to the organized temperance

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work, he wrote a paper on 'The Influence of Christian Women in the Cause of Temperance,' and read it in a hall " in that town. This is said to have been his first appearance on the public platform. Other lectures followed, on the same subject and on health topics, and these were repeated during the two succeeding winters, which he also spent with his wife in various parts of the South. At the end of this time Mrs. Lewis found herself fully restored to health. The next five years, until the summer of 1860, were devoted almost entirely to platform work in the Middle and Northern United States and Canada, speaking six evenings a week on the laws of health and on Sunday evenings urging "The Duty of Christian Women in the Temperance Work."

During these eight years of lecturing Lewis had devoted his spare hours to "the invention of a new system of gymnastics . . . adapted to the classes most needing artificial training." After experimenting for some time with the exercises which he had selected or devised, he determined to concentrate his efforts on the attempt to introduce them to the public, and in June of 1860 established his home in the vicinity of Boston for this purpose. Evening classes in gymnastics were soon organized in a number of the surrounding towns, and a public gymnasium for men, women, and children was opened at 20 Essex Street, in Boston. In August of 1860 the "new system" was all at once brought to the notice of leading educators gathered from the length and breadth of the United States, when the American Institute of Instruction, holding its thirty-first annual meeting in Boston, invited Lewis to appear before it to explain and illustrate his work. A committee appointed to visit the Essex Street gymnasium reported that its im-

pressions were highly favorable to the system, and a resolution declared "that the members of this Institute have . . . witnessed with great pleasure and interest the exercise in gymnastics, under the direction of Dr. Lewis, and that we believe it eminently worthy of general introduction into all our schools, and into general use." One of his objects in coming to Boston had been the establishment of a training school for teachers of the "new system," and in the spring of 1861 the *Normal Institute for Physical Education* was incorporated. The first course opened July 5, 1861, and continued ten weeks. Other similar courses were to be given twice each year thereafter, beginning regularly on the second of January and the fifth of July. In a volume published in 1868, the year which may be said to mark the end of his greatest activity in the interest of physical training, Lewis says that more than two hundred and fifty persons, a majority of them women, had taken the diploma of the Normal Institute in the nine sessions which had been held. He was a voluminous writer, but only two of his published works require particular mention here — *The New Gymnastics for Men, Women, and Children*, first issued in 1862; and the tenth edition, practically a new book, although it bears the same title, which appeared in 1868. A perusal of these volumes will reveal the nature and validity of their author's claims to originality.

After 1868 Lewis returned more and more to the lecture field, which he had never relinquished altogether. The winter of 1873-74 was given up to an extensive course of lyceum lectures in the West, and the balance of 1874 to temperance work exclusively. Out of the "Women's Crusades," which he inspired and helped to

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organize at this time, was developed the Woman's Christian Temperance Union, formed at Cleveland in November of that year. In 1875 he went to California for three years of outdoor life, and in 1881, when obliged to give up active duties again, transferred his home from Boston to New York City. The year 1884 saw him located on a farm at Smithtown, Long Island, in search of rest, but in July able to deliver a course of lectures and teach gymnastics at the Martha's Vineyard Summer Institute. In the fall of 1885 his home was moved to Yonkers, on the Hudson, and there his death occurred in May of the following year.

Then from 1850 to 1861, with the exception of a single year (1852-53), he was teacher of elocution and natural science at Williston Seminary, and early in this period obtained the degree of doctor of medicine from the Harvard Medical School (1853).

Meanwhile, in November of 1854, Rev. William Augustus Stearns had been inaugurated fourth president of Amherst College, and in his inaugural address and his annual reports to the trustees urged impressively, again and again, the adoption of measures designed to protect the health of students. "Physical education is not the leading business of college life," he said in 1854, "though were I able . . . to plan an educational system anew, I would seriously consider the expediency of introducing regular drills in gymnastic and calisthenic exercises." And in 1859 he states his belief that "if a moderate amount of physical exercise could be secured to every student daily, I have a deep conviction . . . that not only would lives and health be preserved, but animation and cheerfulness, and a higher order of efficient study and intellectual life would be secured."

At their meeting in August of 1859, the trustees took steps to carry out at once the president's wishes. Work on the new building was begun in the fall of that year, and the next summer "Barrett Gymnasium" was completed. The name commemorates a liberal donor, Dr. Benjamin Barrett, of Northampton, who had been a near neighbor of the Round Hill School throughout its entire life history. August 6, 1860, following still the lead of the president, the trustees voted to establish a department of hygiene and physical education, the head of which should be a thoroughly educated physician, and the equal of any other member of the college faculty.

"It is distinctly understood that *the health of the students* shall at all times be an object of his special watch, care, and counsel." John Worthington Hooker, a graduate of Yale College and Medical School (1854 and 1857), was appointed to the position at once; but failing health led to his resignation within a year, and by the action of the trustees on August 8, 1861, Dr. Edward Hitchcock was called from Williston Seminary to take the place thus left vacant.

His own attitude toward physical training, and a foreshadowing of what he was soon to undertake, will be found in the course of nine pages of "Remarks upon Muscular Development" in an "Elementary Anatomy and Physiology, for Colleges, Academies, and other Schools," which Dr. Hitchcock had just published (New York, 1860) in conjunction with his father. An article which he prepared in 1878 for the Tenth Annual Report of the Massachusetts Board of Health sums up as follows the essential features of the "Amherst plan" as it was afterwards worked out under his direction: "This department was not created, nor has it been developed, for the purpose of extraordinary attention to the muscular system. Its sole object has been to keep the bodily health up to the normal standard, so that the mind may accomplish the most work, and to preserve the bodily powers in full activity for both the daily duties of college and the promised labor of a long life. . . . At the same time, it has been equally desired, that the so-called exercises of this department should be mentally as well as physically enjoyed by the students, and not be made a tedious, mechanical, or heavy drill. . . . An essential feature of it is, that each student with his class

by itself, at a stated hour on four days of the week, appears at the gymnasium, and performs his part in systematic and methodical exercises timed to music. Each class has its own organization of officers and men. . . . The exercises are commonly known as those of light gymnastics, which consist of various bodily movements accompanied and guided by music; the larger part of them with a wooden dumb-bell in each hand. . . . Especially during the colder season of the year, running is practiced by the class on the floor of the gymnasium. A few marching movements are also undertaken by the classes. This amount of exercise is required of every student who is sound in limb."

In the fall of 1861 Dr. Hitchcock began to note in the case of each freshman the age, weight, height, girths of chest, arm, and forearm, and strength of upper arms (pull-up), repeating the examination afterwards at the end of each year of the course. Other measurements were added from time to time, and about twenty years later the list was considerably extended. The tabulated results appear in the *Anthropometric Manual* published in 1887, and in the revised editions of 1889, 1893, and 1900.

The gift of a new gymnasium to Amherst College in 1884, by C. M. Pratt, of the class of '79, brought new and much-needed facilities, to which important additions have been made during the past thirty years; but the unique contribution of the college, and of Dr. Hitchcock, himself, to the advancement of physical training in America was made in the two decades which succeeded the trustee meeting of August, 1859. Dr. Hitchcock was chairman of the meeting in Brooklyn at which the

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American Association for the Advancement of Physical Education was organized (November 27, 1885). He was also its first president, a member of the committee on statistics and measurements, and a frequent contributor to the early programs.

an uncle. While this interfered somewhat with study, it led to great strength and vigor of body and brought valuable experience with men and affairs. Meanwhile he had joined with other high school boys in putting up a horizontal bar and some other apparatus on the school grounds and starting a gymnastic club. Reports of exhibitions given at Bowdoin College, in Brunswick, sixty miles away to the southwest, added to their zeal, and constant practice brought such a degree of skill that they ventured to give similar public exhibitions of their own, first in the town hall at home, and later in some of the neighboring towns.

An invitation to become director of the gymnasium at Bowdoin College, in the fall of 1869, opened the way to further study for the young expert and started him on a career which was followed thenceforth without interruption. Two years later he was ready to enter the college as a freshman, retaining still the position to which he had been originally appointed, and now the authorities required all students to attend regular class exercises in the gymnasium for a half-hour daily during most of the fall and winter terms, *i.e.*, when they were not occupied with military drill. During his sophomore year Sargent spent three months at Yale College, introducing there the same plan of work, and he continued to divide his time between the two institutions until his graduation from Bowdoin (A. B.) in 1875. The fall of that year found him instructor in gymnastics in Yale College and a student in the Yale Medical School, and from the latter he obtained the degree of M. D. in January of 1878.

The next move was to New York City, where for a year he conducted a private gymnasium on the site after-

wards occupied by the Madison Square Theatre Company. "I elaborated my old system of measurements," he says, referring to this period, "and had the first patterns of my long-contemplated developing appliances constructed. These consist of what are familiarly known as chest-weights, chest-expanders and developers, quarter-circles, leg-machines, finger-machines, etc., to the number of forty different pieces. . . . The attempt was made to ascertain the strength and physical condition of the individual by dynamometers, and other testing and measuring appliances, and then to adapt the apparatus by means of pulleys, levers, adjustable weights, etc., to the strength or weakness of the person as determined by a physical examination."

Meanwhile the Hemenway Gymnasium was nearing completion, and the attention of the Harvard authorities, in search of a man able to insure the best use of such splendid facilities for physical training, was turned to Dr. Sargent by alumni living in New York, and especially by William Blaikie, whose *How to Get Strong and How to Stay So* had just been published (1879). In the chapter on "What a Gymnasium Might Be and Do" he sets forth Harvard's opportunity in language that sounds to us prophetic, and here and elsewhere in the book makes repeated mention of Dr. Sargent's work at Bowdoin and Yale and of the new apparatus which he was then introducing. On September 22, 1879, the Corporation appointed him assistant professor of physical training and director of the Hemenway Gymnasium. His first task was to determine the equipment and to superintend its construction and installation, and the building, therefore, was not ready for use until the following January. In the *Harvard Register* a month later

he explains that the older gymnasia were "filled with crude appliances that have been handed down in stereotyped forms for several centuries [!]. To use this apparatus with benefit, it is necessary for one to have more strength at the outset than the average man possesses. . . . When it is considered that only one man out of five can raise his own weight with ease, the need of introductory apparatus to prepare one for the beneficial use of the heavy appliances becomes quite apparent. It was the realization of this need that led to the invention of the numerous contrivances that have been introduced into the Hemenway Gymnasium; the desire to strengthen certain muscles, in order to accomplish particular feats on the higher apparatus, was the original motive. . . . The results which followed were so satisfactory that the same appliances were afterwards used as a means of attaining a harmonious development. For this last-named purpose each machine has its own use. Each is designed to bring into action one or more sets of muscles, and all can be adjusted to the capacity of a child or of an athlete. . . ."

According to the university catalogue published in 1880, "The attendance is voluntary, and the system adopted is one designed to meet the special wants of each individual. Realizing the great diversity in age, size, and strength, as well as in health, of the students who attend the University, the Director makes no attempt to group them into classes which pursue the same course of exercises. Upon entering the University, each student is entitled to an examination by the Director, in which his physical proportions are measured, his strength tested, his heart and lungs examined, and information is solicited concerning his general health and

inherited tendencies. From the data thus procured, a special order of appropriate exercises is made out for each student, with specifications of the movements and apparatus which he may best use. After working on this prescription for three or six months, the student is entitled to another examination, by which the results of his work are ascertained, and the Director [is] enabled to make a further prescription for his individual case."

A "Handbook of Developing Exercises" was printed in 1882, and a revised and enlarged edition, with illustrations, in 1889. The skeleton Anthropometric Chart (percentile) described in *Scribner's Magazine* for July, 1887, had been issued the year before, and in 1893 table charts were ready, "designed to show the distribution of any American community as to physical power and proportions," and ranging "from ten to twenty-six years of age for either sex, there being one for each age, except that the ages from twenty-two to twenty-six for men, and from eighteen to twenty-six for women are combined." In this same year the statues of typical American students, man and woman, were exhibited at the World's Fair in Chicago.

As early as 1881 Dr. Sargent had begun to train teachers, in the "Sanatory Gymnasium" opened in Cambridge that year, primarily to meet the needs of young women studying in the "Harvard Annex," now known as Radcliffe College. In 1883 accommodations were secured at 20 Church Street, and here during the next two decades more than two hundred and fifty women completed the prescribed two years' normal course of theory and practice. The commodious new building on Everett Street was ready for use in the school year 1904-05, and the course, now extended to

cover three years, was thrown open to men also. Summer courses in physical training, lasting five weeks and given in Hemenway Gymnasium under the auspices of Harvard University, have been offered since 1887. The annual attendance in the first twenty-five years averaged over one hundred students, of whom nearly one third were men, and it now exceeds two hundred.

At the meeting in Brooklyn which resulted in the organization of the American Association for the Advancement of Physical Education, in 1885, Dr. Sargent was elected one of three vice-presidents and was made chairman of the committee on statistics and measurements. In 1890 he was chosen president, and held the same office again in the years 1892-94 and 1899-1901. He has been a member of the National Council from the beginning, has taken part in the proceedings, by paper or discussion, at all but three of the sixteen national conventions, and in 1905 was elected to honorary membership in the Association. He has also been an active member of the Society of Directors of Physical Education in Colleges since its organization in December of 1897, serving as chairman of the standing committee on physical examinations and in the year 1899 as president of the Society.

Outside of these professional associations Dr. Sargent has been busy with voice and pen in the interests of wholesome and nation-wide physical training, and against excesses in athletics, the abuse of military drill in the public schools, and other unwise measures. A list of his more important papers and addresses includes no less than forty titles. He has appeared before the Boston Conference on Physical Training (1899), the Boston Society of Medical Sciences, the Boston So-

ciety for Medical Improvement, the Massachusetts Medical Society, the New England Association of Colleges and Preparatory Schools, the National Educational Association, the American Public Health Association, and the American Social Science Association; and his articles have been published in *Scribner's Magazine*, the *Cosmopolitan*, *Putnam's Magazine*, the *Popular Science Monthly*, the *North American Review*, the *Harvard Graduates' Magazine*, *Education*, the *Educational Review*, and the *School Review*. Two volumes, also, have been issued in recent years—"Health, Strength and Power" in 1904, and two years later "Physical Education," a collection of twelve papers and essays, some of them new. He was a member of the special committee of observation at the gymnastic festivals of the North American *Turnerbund* in Milwaukee (1893), St. Louis (1897), and Philadelphia (1900), and guest of the German *Turnerschaft* at the great Frankfort Festival in the summer of 1908.

XV

GEORGE BROSIUS *

The first introduction of the Jahn gymnastics into the United States, in the years 1825-28, we owe to Follen, Beck, and Lieber, men who had been associated with the German "Father of Gymnastics" (*Turnvater*) or had come under his influence during their university days in Europe and who fled from their native land to America in consequence of the reactionary measures adopted by the Holy Alliance after the murder of Kotzebue by Karl Sand in 1819. Although Prussia's example in suppressing public practice of the Jahn gymnastics (*Turnen*) was followed by other German states, the procedure was by no means universal, so that between 1820 and 1840 not only did the old organizations continue without interruption in certain cities, but a number of new societies of older boys and young men, who met regularly for exercise, were formed here and there. As we have seen (p. 39), there was a general revival of the movement after the accession of Frederick William IV to the Prussian throne in 1840. New clubs or societies (*Turnvereine*) of adults sprang up all over Germany, and these began to meet each other here and

* The history of the German-American Gymnastic Societies and the North American *Turnerbund*, in the years 1848-1886, is given in more detail in the *American Physical Education Review* for December, 1910 (Vol. XV., pp. 617-628).



GEORGE BROSIUS

there in district conventions and for competitive exercises (*Turnfeste*), which also served to exhibit their work to outsiders and win recruits to their ranks. Agitation for reform in state and nation found many bold and able adherents among these later disciples of Jahn (they were known as *Turner* or "turners"), and Saxon and South German members, especially, took an active part in the revolutionary movements of 1848 and 1849. The prompt suppression of all such popular outbreaks and the new reactionary policy pursued by the various governments led to an exodus of thousands of disappointed patriots to the United States, and these brought with them, together with other institutions and customs of the fatherland, the German *Turnen*.

The Cincinnati *Turngemeinde*, the oldest German-American gymnastic society in this country, was organized November 21, 1848, and the New York *Turngemeinde* a week later. Other societies followed in rapid succession, so that within three years there were twenty-five or more in existence with an aggregate membership of nearly two thousand. These were scattered all the way from the Atlantic seaboard to St. Louis in the West and New Orleans in the Southwest, though four societies, in New York, Philadelphia, Baltimore, and Cincinnati, contained about half of the total membership. The first steps looking toward union through the formation of a national association were taken in New York as early as July of 1850, and at Philadelphia on the 5th of the following October delegates from Boston, New York, Brooklyn, Philadelphia, and Baltimore effected a provisional organization, under the name of the "United *Turnvereine* of North America." At a second convention, held in the same city on October 1 and

2 of the following year, the details of permanent organization were completed, and the name was changed to the "Socialistic *Turnerbund*." By October of 1853 the societies numbered about sixty. Three years later ninety-six, with a membership of about five thousand, had joined the *Turnerbund*, and at least twenty more were known to be in existence, and in another four years there were altogether about one hundred and fifty societies. President Lincoln's call for volunteers, in the spring of 1861, met with an immediate response among the German-Americans, whose actions at this time demonstrate beyond question the sincerity of their enthusiasm for freedom and human rights. Exact figures are not available, but it seems tolerably certain that out of the total membership of nine or ten thousand at the outbreak of the Civil War between five and six thousand turners joined the Union army, and to this number should be added about two thousand more who had formerly belonged to societies and now fought side by side with their old comrades. Many societies were so reduced in numbers by enlistment that they found it necessary to disband, and effort was everywhere centered on the support of those who were hastening to the field, or had already gone. During the years of the Civil War, therefore, the *Turnerbund* retained only a nominal existence. Immigration from Germany, where *Turnen* was now making rapid strides, had given an impetus to gymnastics in the larger societies meanwhile, district organizations had been effected, and at Washington on April 3, 1865, delegates from fifty-eight societies met in convention and reorganized the national body under the name since retained, the *Nordamerikanischer Turnerbund* ("North American Gymnastic

Union"). During the next two decades, *i.e.*, from 1866 to 1886, progress was rapid, for the number of societies increased from 96 to 231, the total membership from 6,320 to 23,823, and the active members (those actually taking part in the exercises) from 3,240 to 5,562.

A paragraph added to the by-laws of the *Turnerbund* at a convention held in Pittsburg September 1-5, 1856, provided that a school for the complete preparation of teachers in the theory and practice of physical training should be established in the city where the executive committee was located. This was almost five years before Dio Lewis opened his Normal Institute for Physical Education in Boston. The next September the executive committee reported that lack of means had prevented the carrying out of the provision. In 1860 the committee reaffirmed the necessity of establishing a central normal school, at the same time that it acknowledged the want of success which had hitherto attended its efforts. Soon after the reorganization of the *Turnerbund* in 1865 the new executive committee, in New York City, took up the matter again, and worked out a plan to be laid before the next national convention. This met in St. Louis April 1-4, 1866, and it was now decided to open such an institution at once, with a one-year course which should include lectures on the history and aims of German *Turnen*, anatomy and æsthetics in their relation to gymnastics, and first aid, together with gymnastic nomenclature, the theory of the different systems, and practical instruction with special regard to the training of boys and girls. Only persons whose qualifications as teachers were attested by some *Turnverein* were to be admitted, and certificates of attendance and proficiency were to be awarded to pupils who were suc-

also conducting the exercises at the Milwaukee Gymnasium, frequented chiefly by native Americans. Then followed a year in Chicago (1870-1871), in the service of the "Aurora" and Scandinavian societies. When the third course of the *Turnerbund's* Normal School was opened there, in January of 1871, he became one of the three teachers who directed it. But the great fire of October sent him back to Milwaukee, to open a private gymnasium and take up again his work at the Engelmänn School, and in 1873 to resume his former position at *Turnverein* "Milwaukee."

The next period of his life, and the most fruitful one, opens in 1875, with the transfer of the Normal School of the *Turnerbund* to *Turnverein* "Milwaukee." Brosius became its technical director, as we have seen, and in the ten courses held between 1875 and 1888 more than a hundred teachers of gymnastics were graduated from the institution, to become leaders in *Turnvereine* all over the country, and many of them to undertake the direction of physical training in important city school systems or in other positions of large influence. From 1875 to 1883 Brosius himself served as superintendent of physical training in the public schools of Milwaukee, and after 1878 as instructor in the National German-American Teachers College (*Lehrerseminar*), which had been established there. The "Central *Turnverein*" of New York City drew him away for two years (1889-1891) with its \$800,000 building and its membership of 3,000, to take charge of classes which soon enrolled 160 actives, 100 older men, 150 women, and from 1400 to 1500 children. Meanwhile the Normal School of the *Turnerbund* had been moved to Indianapolis, but a building of its own was now ready in Milwaukee, con-

classes for children in 1854 he joined one of them, becoming a junior member (*Zögling*) of the society soon after and entering into full membership in 1858. Already he had developed such great ability as a gymnast that he was able to win the first prize for juniors at the *Turnfest* of the Western societies held in Milwaukee in 1857. In that year he was also admitted to the militia company commanded by his father. After the latter's death (1859) he moved to St. Louis, and was following there the trade of painter and decorator at the outbreak of the Civil War. Although married only a few months before he immediately returned to Milwaukee, enlisted as a volunteer for the three-year term, and was made sergeant in Company E of the Ninth Wisconsin Regiment. In the fall of 1862 he was taken prisoner, but exchanged at the end of four months, and later received a commission as Second Lieutenant in the Thirty-fifth Regiment of Wisconsin Volunteers. Broken health made it necessary to leave the army in June of 1864.

The career of Brosius as a teacher of gymnastics, which was to continue without interruption for fifty fruitful years, began in the following autumn (1864), when he undertook the direction of the various classes of *Turnverein* "Milwaukee." The regular exercise soon restored his former degree of strength and skill, and a long list of successful appearances in local, district, and national *Turnfeste* gave evidence of his own merit as a practical gymnast and of his gift for developing a corresponding proficiency in his pupils. In 1866 the Engelmann School, one of the first to introduce physical training into its curriculum, secured a part of his time as teacher, and during the same period he was



CARL BETZ

XVI

CARL BETZ

The year 1886 may be regarded as a turning point in the history of the German-American gymnastic societies, and there is some reason for calling the period which precedes this date the *German* one, and that which follows the *American*. The immigrants not unnaturally gravitated toward cities or sections where communities of fellow-countrymen were already established. They continued to use the mother-tongue among themselves, and the consequent imperfect command of English, together with certain continental customs which they retained, serve to explain the fact that few Americans outside of their own ranks appreciated the aims of the *Turnvereine* or knew how much they were doing to provide physical training for children and adults. For example, Dr. E. M. Hartwell, for two years a resident of Cincinnati, and director of the gymnasium at Johns Hopkins University at the time he was asked to prepare for the Bureau of Education a report on physical training in American colleges and universities, had traveled widely in states east of the Mississippi before completing his manuscript in the spring of 1885, and yet did not learn of the existence of *Turnvereine* in the United States until his visit to Germany that summer. Two pages of the appendix to the report, added after his return, are devoted to the North American *Turnerbund*.

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At its national convention in Boston in the summer of 1886 the *Turnerbund* authorized its executive committee to appoint delegates to the second annual meeting of the American Association for the Advancement of Physical Education, and before this body, on the 26th of November following, three papers were accordingly read by representatives thus named, and an exhibition of German gymnastics was given by classes from New York and Brooklyn societies. This was the beginning of a systematic campaign undertaken to acquaint American educators and the public in general with the claims and merits of the German system. Representation by delegates at the annual meetings of the American Association for the Advancement of Physical Education was continued, and at Philadelphia in 1892 an especially favorable impression was made; a special committee of well-known men (Doctors Hartwell, Hitchcock, and Sargent) was invited to attend the national *Turnfest* in Milwaukee in 1893 as guests of the *Turnerbund*, and other similar committees were appointed at several succeeding *Turnfeste*; there were demonstrations and exhibits at the World's Fair in Chicago (1893), together with the distribution of great quantities of printed matter; the first number of the periodical *Mind and Body* appeared in March, 1894; a summer school was held at Milwaukee under the auspices of the *Turnerbund* in 1895 and the three years following; and a "Text-book of German-American Gymnastics" was published in 1896.

For years the *Turnvereine* had provided classes for children of school age, directed by their own teachers of gymnastics and held in their own gymnasia. These enrolled 13,161 boys and 3,888 girls in January of 1886,

and ten years later the numbers had risen to 18,582 boys and 10,274 girls. But within the same decade of expansion (1886-1896) falls the introduction of physical training into the public school systems of many cities under the supervision of graduates from the Normal School of the *Turnerbund*. Among the very first to take such a step was Kansas City, Missouri, in 1885, and CARL BETZ, the man who proposed the action and himself directed the work during the next thirteen years, may be taken as a type of the second period in the history of German-American gymnastics.

His father and mother, both natives of Bavaria, came to America in 1843 and 1844, and were married at Baltimore in the latter year. Their second home was Belleville, Illinois, where the boy was born June 1, 1854. Two years afterwards they moved again, to St. Paul, and in this young capital the father's social and political activity made him member of the common council and of the school-board, United States assessor, one of Minnesota's Presidential electors, and a speaker (in German) in the Greeley campaign of 1872. Carl was educated in the public schools, and took one year of the high school course, but then discontinued his studies to enter a bank as office boy. Four years later he had advanced to the position of general bookkeeper and assistant teller. In April of 1875 he was employed as teacher of gymnastics by the St. Paul *Turnverein*, and the next autumn decided to fit himself further for the work by attending the Normal School of the *Turnerbund*, which had just been transferred to Milwaukee. The four-months' course there was completed early in 1876 and for most of the decade following he was actively engaged in the practice of his new profession in various

western societies,—at South Bend, Indiana (1876-1877), Louisville, Kentucky (1877-1882), Terre Haute, Indiana (1882-1883), St. Paul again (1883-1884), and finally in the *Socialer Turnverein* of Kansas City, Missouri, beginning in January of 1885.

At a meeting of the Kansas City Teachers' Institute on May 2, 1885, Mr. Betz was present with a class of a dozen girls and led them in a series of exercises with wands and Indian clubs which excited much interest. In the discussion that followed the need of some sort of physical education in the schools was generally recognized. He assured the teachers that he could work out a plan which might be successfully introduced, and a motion was carried requesting him to do so. The result was a little pamphlet of eighteen pages, published by the *Socialer Turnverein*. The next October the School Board accepted his proposal to conduct gymnastic exercises in the public schools for three months without pay. Before the end of that period, however, on December 5, 1885, they appointed him director of physical training, and thus he was launched upon the career which ended only with his death, on April 28, 1898. During the last two years of his life he was also supervisor of music in the city schools. The executive committee of the *Turnerbund* made him a member of the committee which represented the German-American Gymnastic societies at the second meeting of the American Association for the Advancement of Physical Education (1886, November 26, in Brooklyn), but the paper which he presented there, on the introduction of gymnastics into the public schools, does not appear in the published *Proceedings* of that year. Another, read at the sixth annual meeting (1891, April 4, in Boston) describes the system and

methods employed in Kansas City, and will be found, much abridged, in the corresponding volume of *Proceedings*. Mr. Betz was also director of the first summer school conducted under the auspices of the national *Turnerbund*, at its Normal School in Milwaukee (1895, July 1 to August 10).

A letter written in 1887 explains his plan of instruction as follows: "On every Saturday the director of physical training drills the principals of the different ward schools. These in turn drill their assistants, the regular teachers, on every Monday. The assistants take up the new drill for the week on every Tuesday. The drill is obligatory, and is taken as any of the other studies. At ten o'clock all principals strike a gong, and at this signal all teachers take up the drill at once (daily). Thus at the same time all school children throughout the city have the same exercise. Each teacher is furnished with a manual of instruction, which clearly marks the work to be accomplished. The scholars, of course, do not leave the school-room. . . . As yet we have only free gymnastics, but as soon as possible dumb-bells, wands, poles, rings, and clubs will follow. Then gymnastic games and popular gymnastics will be taken up, and lastly heavy gymnastics on apparatus." The little manual of instruction to which he refers was afterwards expanded into a *System of Physical Culture in a Series of Four Books*, i.e., *Free Gymnastics* (Kansas City, 1887), *Gymnastic Tactics* (1887), *Light Gymnastics* (1887), and *Popular Gymnastics: Athletics and Sports of the Playground* (1893). Later editions of these books, all more or less revised, were published in Chicago (A. Flanagan Co.). Additional volumes were planned, and even announced as "in preparation," but

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never completed. The ones named were adopted as guides in the schools of numerous other cities, and also served as models for similar works prepared by fellow-graduates of the Milwaukee Normal School who occupied corresponding positions elsewhere.

XVII

ROBERT JEFFRIES ROBERTS

In 1869, eighteen years after the introduction of the Young Men's Christian Association into America, the first Association buildings to contain gymnasias were dedicated, in San Francisco and New York, and in the latter city William Wood took up his duties as the first director of an Association gymnasium. By the close of another eighteen years, when the number of gymnasias reported had increased to 168, and the paid directors to 50, it had become apparent that steps must be taken to provide adequately trained leaders for this phase of work in individual Associations and some sort of general oversight for the whole country. Accordingly in 1887 a department of physical training was added to the Young Men's Christian Association Training School in Springfield, Mass., a summer school for gymnasium directors was also opened at that institution, and the International Committee established a department of supervision of the physical work with a special secretary at its head. Luther H. Gulick, a young student who had just finished his first year in the medical department of New York University, was chosen to fill the office thus created, and was also made one of two instructors in the new department at the Springfield Training School. The other, ROBERT JEFFRIES ROBERTS, was a veteran



ROBERT JEFFRIES ROBERTS

(Portrait taken in the late 70's.)

of twelve years' experience as director of the gymnasium at the Boston Young Men's Christian Association, and at that period the most influential and widely known teacher of gymnastics engaged in Association work.

His colleagues in the earlier days had been drawn in many cases from the ranks of professional gymnasts, trained in difficult and showy feats of strength and skill. William Wood, an Englishman born in December, 1819, had conducted a private gymnasium in New York for thirty years before he was called upon to superintend the equipment and exercises in the new Twenty-third Street building (1869-1889).^{*} At the Brooklyn Association in the eighties was James Douglas Andrews, born in Kilmarnock, Scotland, July 25, 1839, who became proficient in gymnastics and athletics under the tuition of the Huguenins in London, and for nearly a score of years had been in charge of private and other gymnasia in Glasgow, Belfast, Ottawa, Toronto, and at various points on the Pacific coast. John C. Doldt, of the Providence Association, was the first manager and instructor at the Tremont Gymnasium, on the corner of Eliot and Tremont streets in Boston (opened in 1859), and afterwards traveled about the country as a professional athlete. Roberts himself had come under the influence of Doldt and of Dr. George Barker Windship (1834-1876), a graduate of Harvard College and Medical School, who went about lecturing on physical culture and giving exhibitions of heavy lifting, in the

^{*} See his "Manual of Physical Exercises: Comprising Gymnastics, Calisthenics, Rowing, Sailing, Skating, Swimming, Fencing, Sparring, Cricket, Baseball. Together with Rules for Training and Sanitary Suggestions." New York, Harper & Brothers, 1867. Second edition, enlarged, in 1870.

sixties, and whose interesting "Autobiographical Sketches of a Strength-Seeker" were published in the *Atlantic Monthly* in 1862 (vol. IX., pp. 102-115).

It was such models as these that Roberts sought to copy during his own years of apprenticeship. He was born in Boston June 29, 1849, nearly completed the course of study at the Phillips Street Grammar School, at fifteen entered the service of the Western Union Telegraph Company, first as messenger boy and afterwards as delivery clerk, and finally gave up this position to earn his living by the wood-turner's trade. Primarily to escape from the evil influences of the streets, he joined the Tremont Gymnasium in 1864, and a few years later was both exercising and giving instruction at the Union Gymnasium, 300 Washington street, and also visiting Dr. Windship's gymnasium across the way, next door to the Boston Theater. When the Young Men's Christian Association bought out the Tremont Gymnasium, in 1872, he continued his membership there, and now made it his practice to go two nights a week each, in regular rotation, to the Union, Association, and Windship gymnasia. He had been working ahead in the dark very largely, but derived much inspiration from Dr. W. W. Hall's *The Guide-Board to Health, Peace and Competence; or, the Road to Happy Old Age* (Springfield, Mass., 1869). This was a large volume, written in popular style and sold by subscription for \$6.50, and he paid for it in instalments at the rate of fifty cents a week. In 1875, having determined to devote himself to the new calling, he asked to be made superintendent of the Association gymnasium, and on the first of July began to discharge the duties of that position.

A list of his best performances at about this time will serve to show the aim and results of the strenuous course of discipline to which Roberts had subjected himself hitherto. Although only five feet five inches high, he weighed 145 pounds and had a 43-inch chest, 32-inch waist, 23-inch thigh, 14½-inch calf, and 15-inch upper arm. With a yoke on his shoulders he lifted 2200 pounds, could rise from a lying to a sitting posture while holding a 100-pound weight back of his neck, push up a 120-pound dumb-bell with each hand, pull himself up to the chin three times with either hand and 35 times with both, had covered more than 12 feet in one broad jump and 35 feet in three, cleared four feet six inches in a standing high jump from either side, five feet four inches in a leap with running start, and nine feet with the pole, put the 16-pound shot 35 feet right and left, threw the 16-pound hammer 70 feet, walked a mile in less than eight minutes and six miles an hour, ran a hundred yards in 11 seconds and five miles in 30 minutes, had learned to box and wrestle, and was a good swimmer and oarsman.

But this is not the type of work which Roberts advocated in 1887, when he was called from Boston to Springfield, or that for which he is remembered in Association circles today. After a few years of experience, he says, it began to dawn upon him that health did not necessarily improve as strength increased, and that the Windship plan of heavy lifting was not calculated to yield "the greatest good to the greatest number, physically speaking," any more than the Dio Lewis exercises, which he considered too light and easy. "I noticed when I taught slow, heavy, fancy, and more advanced work in acrobatics, gymnastics, athletics, etc.,"

he writes,* "that I would have a very large membership at the first of the year, but that they would soon drop out because they could not do the work, and . . . the weak members would not renew the next season. . . . I give most of my attention to those who need it most, the beginners and those who cannot for various reasons do the more advanced work. By . . . pushing simple work I can get more men to go into it, and find it easier to find leaders to teach it, and also can run more classes in a day. . . . In competitive work and the harder kind of safe exercises . . . the men leave the classes and become spectators, but when I teach easier work the crowd do the work and the few look on." He was also led to emphasize trunk exercises rather than those of the legs and arms, in order to influence respiration and circulation favorably and keep the abdominal organs in a condition of healthy activity; and special attention was given to those muscles which expand the chest, draw back the head and shoulders, and hold the body erect.

According to the Roberts "platform," as it came to be known, all exercises should be "safe, short, easy, beneficial, and pleasing." They must be safe for the man who does them, *i.e.*, well within the limits of his capacity at the time. When apparatus is employed such work must be selected that the members of the squad or class follow each other rapidly, without tedious waits. No exercise must represent more than a slight advance over others which have preceded it. Each "must serve some definite and useful end," instead of

* Quoted by Dr. Gulick in the *Association Seminar* for May, 1908, in the course of an authoritative and exhaustive paper on Roberts and his work.

being chosen at random and with nothing in mind beyond the mere desire to keep the class busy. It must give pleasure if it is to exert its full effect and not degenerate into a sort of monotonous and mechanical "grind." These principles found illustration in the *Roberts Dumb-bell Drill*, the *Home Dumb-bell Drill*, and the little volume of *Classified Gymnasium Exercises, with Notes*,* which were very generally used in Association gymnasias twenty years ago.

While he was still in Boston Roberts had been conducting a sort of training school, and during the years 1885-87 twenty-five or thirty men went out from his gymnasium to become instructors. At Springfield the summer session of 1887 (six weeks) was attended by twenty-four men, or 48 per cent. of the whole number then engaged in Association work; that of 1888 (July 17-August 21) by fifty men, or 66 per cent.; and the third, in 1889 (June 30-July 31), by fifty-seven men, or 62 per cent. At the regular sessions of the Training School there were five juniors and one senior in the Gymnasium Department in the year 1887-88, and six juniors and two seniors in 1888-89. After two years in Springfield Roberts resigned to take charge of a new Association gymnasium in Utica, New York, but the next year (1890) accepted an invitation to return to his old position in Boston, where he is still Association physical director, "busy as a bee and happy as a lark" in his beloved work, he writes. Together with several assistants he conducted four-weeks' summer courses there in July of 1893 and 1894, himself teaching the system of floor work which he had made so widely popular.

* Compiled by A. K. Jones. Cedar Rapids, Iowa, 1889. Other editions later.

Dr. Gulick, in summing up his contribution to physical training in the Associations, credits Roberts with having developed "a distinctive style of gymnastic work which is exceedingly simple, is attractive, can be operated in large classes, is effective in relation to the vital functions of digestion, circulation, and respiration, and which can be successfully taught by teachers of mediocre ability." The wholesome and helpful personality of the man, his unswerving loyalty to his own platform, and the enthusiasm for right living with which he inspires his classes have made him a notable figure among his colleagues. The "Health Hints" and other short articles published from time to time, chiefly in the *Young Men's Era* and other Association organs, have been lay sermons on his one text, "hygienic body-building." Among other inventions and improvements in gymnasium equipment, we owe to him the indoor shot, the medicine ball, the thin felt mattress, and the felt and canvas running track.

boy, N. J., went to New York City for three years in medicine, first at the College of Physicians and Surgeons and then in the medical department of the University of New York, from which he was graduated in the spring of 1850. The next year he was ordained as a missionary, married Louisa Lewis, daughter of a New York merchant, and started back on the long journey around Cape Horn. For eight years (1852-60) he was stationed at Ponape and Ebon Islands, in Micronesia. At the end of that time, broken in health, he returned to Honolulu. Several years of public speaking on missionary topics in the United States followed, and then from January of 1864 till February of 1870 he was secretary of the Board of the Hawaiian Evangelical Association, the agent of the American Board on the Hawaiian Islands and in Micronesia.*

Here at the home in Honolulu, on the 4th of December, 1865, was born his third son and fifth child, named LUTHER HALSEY GULICK, after the father. The first fifteen years of the boy's life were far from monotonous. In 1870 Dr. Gulick was back in New England, as a temporary district secretary of the American Board, and here his family soon joined him. Late in 1871, upon the Board's decision to undertake missionary work in Roman Catholic countries, they sailed for Spain, to make their home in Barcelona for two years and a half. August of 1873 found them settled in Florence, but the closing of the mission in Italy the next year was followed by Dr. Gulick's return to the United States, and in 1875 he accepted a call to become the agent of

* See "Luther Halsey Gulick, Missionary in Hawaii, Micronesia, Japan, and China," by Frances Gulick Jewett. Boston and Chicago, Congregational Sunday School and Publishing Society, 1895.

the American Bible Society in China and Japan, with headquarters in Yokohama. Meanwhile the family had remained in Europe for six months after his own departure for America, and now Mrs. Gulick and four of the children were left behind in California, and did not follow him to Japan till 1877. Three years later Luther Halsey again crossed the Pacific, to make his home for a time in Ohio with an older sister whose husband had just been appointed to a professorship in Oberlin College.

Two uncles had graduated from Williams College, and his two older brothers, Sidney Lewis and Edward Leeds, completed the course at Dartmouth in 1883, but his own desire for college education was not to be gratified. Although he was enrolled in the preparatory department of Oberlin College during a part, at least, of the school years 1880-82 and 1883-84, severe headaches which now made their appearance rendered continuous application to study impossible and finally compelled a change of plan. He had entered the middle preparatory class in the fall of 1885, but was taking some work in the college department and rooming with a sophomore, Thomas D. Wood, now Dr. Wood of Columbia University. What happened just at this time may be told in his own words.* "The advent of one of Dr. Sargent's graduates, Miss Delphine Hanna, now Dr. Hanna, had brought to our minds in a more vivid way than ever before, that there really was such a thing as scientific teaching of gymnastics, genuine body building. We had both of us been very much interested in the gymnastics and athletics of the college, had identified ourselves

* *Physical Education* I: 25 (1892, April).

thoroughly with all the work that was going on in these lines, and had read as far as we were able what had been written on the subject at that time. Blaikie's *How to Get Strong*, particularly the chapter entitled 'What a College Gymnasium Might Be and Do,' filled us with enthusiasm. One Sunday afternoon we took a long walk out into the woods, and sitting beside a rail fence (I can picture the situation even now), we looked forward to the future of physical training. We spoke of the relation of good bodies to good morals, we thought of the relation of bodily training to mental training. . . . That day, that hour, was a turning point for both of us; and . . . the glimpse which we secured that day of the future has remained . . . a prophecy of the work which each of us was to do. . . ."

His own course thus determined upon, Gulick at once left Oberlin for Cambridge, Mass., to spend the winter in Dr. Sargent's Normal School of Physical Training. On April first following (1886) he began his professional career, as superintendent of the gymnasium with the Young Men's Christian Association of Jackson, Mich.; but withdrew from this position the next fall in order to take up the study of medicine at the University of New York, from which his father had graduated thirty-six years before. For six weeks in July and August of 1887, together with Robert J. Roberts, he conducted the first summer school for directors of Association gymnasia, at the Springfield, Mass., Training School, and these two men constituted the special teaching staff of the department of physical training which was added to the school at this time and opened its first regular session on Armory Hill early in September of the same year. The next month the Inter-

national Committee secured a part of his time for the task of supervising the physical side of Association work in the country at large. Meanwhile his medical studies in New York were continued and completed in 1889. He also served in 1887-88 as medical examiner at the Twenty-third Street Association, where William Wood was still superintendent of the gymnasium, and during a part of the New York period was in charge of the physical training at a girls' school in Harlem.

For thirteen years, until the close of the school year 1899-1900, Dr. Gulick retained his position at the International Young Men's Christian Association Training School in Springfield, after 1888 as superintendent of the physical department and during most of the time as instructor in the history and philosophy of physical training. The service under the International Committee was continuous from October of 1887 till his appointment as director of physical training in the public schools of Greater New York, in 1903. The problem that confronted him was twofold — first to find and train new men for the physical directorship and to unite and guide and stimulate those already in the field; and second to develop a type and methods of work suited to Association conditions. In 1887 there were only fifty "superintendents" and three assistants employed in the 168 gymnasias reported by American Associations. By 1900 the number had increased to 244 physical directors and 22 assistants, in 491 gymnasias, and nearly 80,000 men and 20,000 boys were being reached by physical agencies. The regular course at the Springfield Training School covered two years until 1895, when it was extended to three, and meanwhile, in 1890, a second and independent institution of similar sort had been incorporated in Chi-

cago. A \$24,000 gymnasium on the new grounds overlooking Massasoit Lake was ready in the fall of 1894, and a dormitory building in the winter of 1895-96. For five years, from 1887 through 1891, summer courses, lasting from four to six weeks, were given at the Training School, and attended, respectively, by 25, 50, 57, 33 and 23 men. A western section, at Lake Geneva, Wis., in July of 1890, had an attendance of sixteen. These were succeeded by summer "Conferences," more informal and intended for directors already in the work, which met for a week or ten days each year from 1892 through 1895. In 1896 and thereafter the conferences were held under the auspices of the International Committee. Additional educative means were the correspondence courses for physical directors, first offered by the Training School in the fall of 1891 and continued for four years, and the monthly Athletic League Letter, beginning in November of 1898. The Physical Directors' Society of the Young Men's Christian Associations of North America was organized in June, 1903, at Lakewood, N. J.

The relation of physical training to Association work as a whole, and the type and methods suited to Association conditions, Dr. Gulick considered in a paper on "Our New Gymnastics," read at the twenty-eighth International Convention (Philadelphia, 1889, May 11) and one on "The Distinctive Features of the Physical Work in the Association" at the twenty-ninth Convention (Kansas City, 1891, May 9). He urged that man is a unit, that the Associations "are working for *young men*, not simply for their bodies, minds and souls, but for the salvation, development and training of the whole man complete as God made him," and that physical education

therefore forms a vital part of the Association program. The objects of exercise and the sorts needed in Association gymnasia were discussed at the first and second summer conferences of physical directors (1892 and 1893) and in the columns of *Physical Education* for May, 1892, and January and October, 1893. He furnished the chapter on the Physical Department for *A Hand-Book of the History, Organization, and Methods of Work of Young Men's Christian Associations*, issued by the International Committee in 1892 (pp. 297-339), and presented the claims of "The Physical Directorship of the Young Men's Christian Association as a Life Work" in a pamphlet published by that body in 1890.

A desire to render anthropometric methods uniform and useful resulted in a "Manual for Physical Measurements in connection with Association Gymnasium Records," which was ready in 1892. An anthropometric chart was also compiled and published. He read a paper on "The Value of Percentile Grades" before the American Statistical Association February 10, 1893, and for volumes II. and III. of *Physical Education* (1893, November-1895, January) prepared a series of articles on "Physical Measurements and How They Are Studied." In connection with the summer conferences various "hygienic drills" and lists of exercises on apparatus suitable for Association use were elaborated. James Naismith, at the Training School, invented basket ball in 1891 to meet the need of a good indoor game. To promote all-round development a *Pentathlon* comprising the hundred-yard dash, throwing the twelve-pound hammer, the running high jump, the pole vault, and the mile run was recommended, with a scheme for

uniform scoring. Some years of agitation and discussion led in 1895 to the formation of the Athletic League of Young Men's Christian Associations of North America, designed primarily "to band together those who feel that athletics are often large elements in the formation of character, and to arrange for them lines of co-operation"; and "to foster a better spirit of manliness in connection with these activities that will banish from them the discourtesy and dishonesty by which they have been too often disgraced." The first official handbook of the League was issued in 1897.

Gymnastic therapeutics formed the subject of a course of lectures given at the Thousand Islands Conference in 1900, and a series of articles published in volumes I. and II. of *Physical Training* (1901, November-1903, April); and material prepared originally for classes at the Training School and for the Athletic League Letter appeared later under the title "Physical Education by Muscular Exercise" as Part II. of the seventh volume ("Mechanotherapy") in *A System of Physiologic Therapeutics*, edited by Dr. S. S. Cohen (Philadelphia, 1904). The duty and opportunity of the Association in its relation to boys was emphasized at the Mobile, Ala., Convention in 1897, in volumes VII. and VIII. of the *Association Outlook* (1897-99), and before the Physical Directors' Conference at Dayton, Ohio, in June of 1899. Other studies led to papers on "Some Psychical Aspects of Muscular Exercise" (Appleton's *Popular Science Monthly*, 1898, October) and "Psychological, Pedagogical, and Religious Aspects of Group Games" (*Pedagogical Seminary*, 1899, March). How indefatigable has been Dr. Gulick's pen may be gathered from a bare enumeration of the periodicals

which he employed successively as a regular means of expression: the Physical Department of the *Young Men's Era* (1890, to September 1), the *Triangle* (1891, February-1892, January 15), *Physical Education* (1892, March-1896, July), *International Association Training School Notes and Association Outlook* (1897, January-July), the *Association Outlook and Training School Notes* (1897, October-1900, July, two volumes), and *Physical Training* (1901, November-1903, June, two volumes). He was also editor of the *American Physical Education Review* from June of 1901 through 1903.

In 1900, not yet thirty-five years old, Dr. Gulick resigned his position at the Springfield Training School in order to become principal of the Pratt Institute High School, in Brooklyn. Three years later he was appointed director of physical training in the Public Schools of Greater New York, but retained this office only till 1908, and then accepted the directorship of the department of child hygiene under the Russell Sage Foundation. In 1913 he became president of the "Camp Fire Girls." A study of his labors since 1900, in these new fields, in organizations like the American Physical Education Association and the Playground Association of America, and as an advocate of the Efficient Life by spoken and written words which reach an ever-growing audience would carry us beyond the immediate object of this sketch, which is to suggest the place he has filled in the evolution of ideals, means, and methods of physical training in the Young Men's Christian Associations of North America.

Orleans 1884-85, in connection with the exhibit of the Bureau of Education, and Commissioner Eaton had placed Mr. Nissen in charge of this and other gymnastic apparatus. Other isolated instances might be cited, but it was not until 1889, however, that the claims of Swedish educational gymnastics were brought forward in the United States so prominently and stated with such clearness and cogency as to attract general attention. Boston was the center from which the movement radiated, and its initiation was due to the public spirit and liberality of Mrs. Mary Hemenway (1820-1894) and the executive ability of her assistant, Miss Amy Morris Homans, coupled with the thorough professional training and forceful personality of BARON NILS POSSE (1862-1895), the agent who first made their plans effective and afterwards conducted an independent and vigorous campaign of enlightenment until his untimely death.

Baron Posse was born in Stockholm, where his father, a major in the army, was at one time chief of the Royal Staff College. Both parents ranked among the Swedish nobility. The boy, an only son, was graduated from a private high school at the age of eighteen, and afterward completed the fifteen-months' course at the Royal Military School, and the two years of study and practice then offered at the Central Institute of Gymnastics, including medical as well as educational and military gymnastics. Meanwhile for five years he had been enrolled in the Swedish army, half of that time as a private and later as second lieutenant, first in the Life Grenadier Regiment and then in the Royal Svea Artillery. Outside of this formal training his fondness for physical activity led him to join the Stockholm Gym-

nastic and Fencing Club, the Gymnastic Association, the Rowing Club, and two skating clubs, and in fancy skating he won his title as amateur champion over some of the most accomplished masters of that art in all Sweden.

It was on his twenty-third birthday (1885, May 15) that Baron Posse graduated from the Gymnastic Central Institute. Three months later he was on his way to America, and in October, after a visit to Nissen, then vice-consul of Norway and Sweden in Washington, he took up his residence in Boston with the hope of interesting physicians there in medical gymnastics and building up for himself, with their coöperation, a practice in that method of treatment. The first attempts were not encouraging, and progress was slow, yet after three years of such efforts opportunity at length knocked at his door — an opportunity not of his own choosing, but it found him ready. In the interval he had been married to Miss Rose Moore Smith of Newburyport. Besides writing a sixteen-page pamphlet on Medical Gymnastics (Boston, 1887), he had also completed an abridged translation into Swedish of an article on Massage by Dr. Douglas Graham (Lund, 1889), and was at work on an English translation of the Swedish physician Björnström's work on *Hypnotism: Its History and Present Development* (in the *Humboldt Library of Science*, New York, 1889). These labors help to explain that rare command of the language of his adopted country for which he was afterward conspicuous.

Mrs. Mary Hemenway (1820-1894), whose only son had given the new gymnasium to Harvard College ten years before, was herself widely known as one of the wealthiest women in Boston and as a wise and generous

dispenser of her riches for the promotion of worthy objects, at home and elsewhere. The introduction of systematic training in sewing and of the kitchen garden and school kitchen into the city schools were among the results of her efforts. Together with Miss Homans, who has been called "one of her right hands" in the execution of such projects, she had been impressed with the need of some efficient system of physical training for school children. A friend suggested Swedish gymnastics, and spoke of the graduate of the Stockholm Gymnastic Central Institute who was at that time living in Boston. Baron Posse was accordingly consulted, and in October of 1888 Mrs. Hemenway employed him to demonstrate the system in a course of lessons given to twenty-five or more women teachers gathered from the public schools. A small room on Boylston Place was leased for the purpose, and larger quarters, in Park Street, were afterwards secured.

On the twenty-fifth of the following June the Boston School Committee accepted her offer to furnish free training for one year, beginning in September, to "one hundred public-school teachers, who may be permitted to use the system in their school work, thus enabling your Honorable Board, and educators in general, to decide upon its merits by actual results produced upon the school children within the environment of the school-room." At the same meeting the Board of Supervisors was authorized "to report in print upon the subject of physical training in the schools." September 24 the committee accepted Mrs. Hemenway's further offer to provide "a teacher of the Ling system of gymnastics for service in the Normal School for one year, free of expense to the city." October 8 the Board of Supervisors

reported, recommending " that the Ling system of gymnastics be the authorized system of physical training in the public schools," and at the same meeting a letter was read in which Mrs. Hemenway expressed her willingness to " provide instruction, free of expense to the city of Boston, for those masters and sub-masters who may desire to make a thorough study of the Ling system for the benefit of the Boston public schools." The report was laid on the table, but the offer was accepted two weeks later. Baron Posse continued to give instruction to all these various classes up to January of 1890. Several small normal classes were also organized in 1889, which mark the beginnings of the Boston Normal School of Gymnastics, established and afterwards endowed by Mrs. Hemenway, and with Baron Posse as its first director. In his annual report dated March 31, 1890, Superintendent Seaver writes that these demonstrations of Swedish educational gymnastics had already been attended by " thirty masters, twenty-four sub-masters, and 166 other teachers. These have imparted their knowledge to yet other teachers, so that there are now 360 teachers prepared to use the 'Ling system' in their classes. In addition to these may be counted ninety-seven recent graduates of the Normal School, who have all received instruction in this system."

Mrs. Hemenway and Miss Homans were also responsible for the calling together and successful conduct of that notable " Conference in the interest of Physical Training " which was held in Boston on November 29 and 30, 1889. From one to two thousand persons attended each of the four sessions, which were presided over by William T. Harris, United States Commissioner of Education, and addressed by many well-known edu-

cators and by representatives of a variety of systems. At the beginning of the second session Baron Posse set forth "The Chief Characteristics of the Swedish System of Gymnastics" in a masterly paper, followed by a demonstration of that system by a class of women under his leadership. One result of this wisely planned and persevering agitation of the subject was the action of the Boston School Committee taken June 24, 1890, in line with the report and recommendations of its committee on physical training presented two weeks before, which ordered "that the Ling or Swedish system of educational gymnastics be introduced into all the public schools of this city." In November of that year Dr. Edward Mussey Hartwell of Baltimore was elected Director of Physical Training, to hold office from January 1, 1891.

Meanwhile Baron Posse had been succeeded at the Boston Normal School of Gymnastics by Claës J. Enebuske in the middle of January, 1890; but on the first of the following month he opened a gymnasium and training school of his own in the Harcourt building, on Irvington Street. The six years of life that remained were crowded with incessant teaching and writing. During this period, it is said, "gymnastics according to his methods were officially introduced into the public schools of fifty-two cities and towns, and into as many more private institutions and academies. Clinics for medical gymnastic treatment were established by him in most of the larger Boston hospitals, and instruction was given to the nurses of many hospitals in adjacent towns." Summer courses for teachers and others were conducted at the Martha's Vineyard Summer Institute (1890, 1891, 1892), in his Boston gymnasium (1892,

1894, 1895), and at Harvey, Illinois (1893), while he was in charge of the elaborate exhibit sent to the Chicago World's Fair by various Swedish gymnastic societies and athletic clubs.

A book more complete than anything published in the Swedish language, at the time it appeared, was his volume on *The Swedish System of Educational Gymnastics* (Boston, 1890), republished later in the same year with additions. In a third edition (1894), considerably enlarged, the title was changed to *The Special Kinesiology of Educational Gymnastics*. His small *Handbook of School Gymnastics of the Swedish System* was ready in 1891. Among his more important papers were *How Gymnastics Are Taught in Sweden* (1890), a series on *The Scientific Aspect of Swedish Gymnastics* (1890-92), *The Necessity of Physical Education and the Means of Introducing It into American Schools* (1891), *Modifications of the Swedish System of Gymnastics to Meet American Conditions* (1892), and *Swedish Gymnastics vs. German* (1893). Four of these are included in his *Columbian Collection of Essays on Swedish Gymnastics* (1893). The first number of the *Posse Gymnasium Journal* (monthly) was issued in December of 1892, and for four years thereafter nearly every number contained at least one contribution from his pen. Baron Posse's death occurred on the 18th of December, 1895, but as late as 1905 the *Journal* was still publishing material selected or prepared from his literary work.

Other pioneers of Swedish school gymnastics who deserve further mention, or should be included here, are Hartvig Nissen, Claës J. Enebuske, and Jakob Bolin. *Nissen*, born in Christiania July 13, 1855, was educated

in the higher school opened by his father in the Norwegian capital, studied gymnastics and massage with private teachers here and later in Dresden and Stockholm, for three years taught gymnastics in towns near Christiania, and in 1883 established a "Health Institute" in Washington, D. C., as we have seen. 1891-1897 he worked with Dr. Hartwell in the Boston public schools as assistant director of physical training, and 1897-1900 himself served as director. In 1891 he became instructor in Swedish gymnastics and massage in the Harvard University Summer School, and five years later in the Sargent Normal School of Physical Education, both of which positions he has held ever since. 1900-1912 he was director of physical training in the Brookline public schools. *Enebuske* was born in Ystad, southern Sweden, May 6, 1855, graduated as a student of pharmacy in Stockholm (1877), and took his doctor's degree (Ph.D.) at the University of Lund in 1886. After a year of special work in school and medical gymnastics, under Colonel Norlander, he came to New York in 1887. Dr. William G. Anderson, then in charge of physical training in Adelphi Academy, Brooklyn, had begun to train teachers there (1885) and at Chautauqua, New York (summer school, in 1886), and he secured Enebuske's services at the latter in the summers of 1889 and 1890, and in his normal school during the intervening year. We have said that Enebuske succeeded Posse at the Boston Normal School of Gymnastics early in 1890. Here his chief work was done, in the eight years that followed, and meanwhile (1896) he graduated from the medical department of Harvard University. In 1898 he left the Normal School, and in 1902 removed to Paris. *Bolin*, born in Stockholm

November 5, 1863, and educated in the higher schools of Visby and Stockholm and at the Stockholm University, spent two years in the United States (1885-1887) and then returned to Sweden for a year to study medical gymnastics in Liedbeck's Institute (Stockholm). From 1888 until he accepted the professorship of physical education in the University of Utah in 1910, he practiced this profession in New York City, but in the meantime followed Enebuske as teacher of Swedish gymnastics at the Anderson Normal School of Physical Education (transferred to New Haven in 1892 and since 1901 known as the New Haven Normal School of Gymnastics), until 1907, and at Chautauqua Summer School (from 1891). He died in Salt Lake City, May 15, 1914.

conscious of adequate mastery of his theme, and gifted with a pungent vigor of expression that compelled attention.

Dr. Hartwell came from a long line of New England ancestry. Shattuck Hartwell, his father, a graduate of Harvard College and Law School, was just closing the fourth year of service as tutor in Latin at Harvard when the boy was born (May 29, 1850, at Exeter, New Hampshire). The mother was a daughter of Dr. Reuben Dimond Mussey, who after holding for almost a quarter-century a professorship in the medical department of Dartmouth College, his *alma mater*, had moved to Cincinnati twelve years before to become professor of surgery in the Medical College of Ohio. In the fall of 1850 Shattuck Hartwell took up his residence in the same city, but after less than seven years in the practice of law returned to Littleton, Mass., his birthplace, thirty miles northwest of Boston. This was henceforward the family home. With the exception of a few years, he was employed in the Boston Custom House from the fall of 1865 until his death in 1899.

Edward, the oldest of eight children, graduated from the Public Latin School in Boston at the age of nineteen. It is worth noting that as one of Captain Hobart Moore's orderly-sergeants in the school battalion he gained experimental knowledge of military drill at this period. Then followed four years at Amherst College (A.B. 1873, A.M., 1876, LL.D. 1898), and the fact that he was chosen captain of his class in the gymnasium in the junior year, rowed on class and other crews, and was at one time commodore of the navy, suggests not only physical fitness and gifts of leadership, but also the influ-

ence of Dr. Edward Hitchcock and the department of hygiene and physical education. In 1871 he won the gold medal for excellence in human physiology. College days were succeeded by four years of teaching, first as vice-principal of the high school in Orange, New Jersey (1873-74), and then as "usher" in the Public Latin School in Boston (1874-77), where he had once been a student. At the latter Hobart Moore was still instructor in military drill, and in obedience to the wish of the headmaster Hartwell introduced the Amherst plan of class exercises in light gymnastics among the smaller boys.

Greatly interested in natural science, he had already attended the summer school at Penikese Island, and this inclination now led him to abandon teaching for a time. An uncle, Dr. William Heberden Mussey, was professor of surgery in the Miami Medical College in Cincinnati, and prominent in scientific and educational circles in the city. Thither he came, therefore, to take up the study of medicine (1877-78), but interrupted the course for three years in biology at Johns Hopkins University (1878-81), leading to the degree of Ph.D., and did not receive his M.D. in Cincinnati till 1882. In Baltimore, where he was fellow in biology for two years in succession (1879-81), he made animal physiology, under Prof. H. Newell Martin, his principal study, and the subordinate ones animal histology and morphology under Dr. William K. Brooks. Membership in and papers before the Scientific Association, the History and Political Science Association, and the Metaphysical Club attest the breadth of his view at this time, and reveal a fondness for historical as well as biological research.

After a summer's work in Baltimore in 1881, and before entering upon the second and final year in Cincinnati, Dr. Hartwell went home to Littleton for a brief vacation, and in Cambridge looked over the new Hemenway gymnasium and made the acquaintance of Dr. Sargent. Interested in what he saw and heard, he spoke of the visit to Herbert B. Adams, another Amherst man, then associate in history at Johns Hopkins University. The students at the university were agitating the subject of a gymnasium. It was therefore natural that his advice should be sought, and the next fall (1882) he was offered the position of instructor in physical culture. The death of Dr. Mussey in Cincinnati, on the first of August, had left him without definite plans for the future, and a leaning toward hygiene moved him to accept the call to Baltimore. In June of 1883 the trustees authorized the construction of a \$10,000 gymnasium, which was ready for use before the Christmas holidays. It was supplied with the Sargent developing appliances, and he at once introduced the Sargent plan of physical examinations and prescribed individual work, in place of class exercises, and also gave lectures to undergraduates on health topics. After two years of service he became Associate in Physical Training and Director of the Gymnasium, and remained at Johns Hopkins in that capacity until the end of 1890.

An address which Dr. Hartwell delivered to the students of the university and others on the occasion of the formal opening of the new gymnasium, December 7, 1883, contained a review of the history of physical training in ancient and modern Europe and in America. Soon afterwards Commissioner John Eaton, of the United States Bureau of Education, asked him to pre-

pare a special report for that department. The result was a visit to college and other gymnasia from Maine to Tennessee, in the summer of 1884, and the manuscript for a volume of 150 pages on *Physical Training in American Colleges and Universities*, with illustrations and plans, which was handed in on the fourth of March following. Immediately upon completing it he sailed for Europe, to look up matters relating to hygiene as well as gymnastics. After a brief visit to England he spent most of the time in Frankfort and Berlin, with a side trip to Dresden for the Sixth General Gymnastic Festival of the German *Turnerschaft*, and some attendance upon clinics in Vienna. A twenty-five page appendix on "Physical Training in Germany" was now added to the former report, and two pages on the North American *Turnerbund*, whose existence he had discovered while abroad, and the whole was issued as No. 5 — 1885 of Circulars of Information of the Bureau of Education (Washington, 1886).

It seems to have been this visit of Dr. Hartwell's to Germany which led, directly or indirectly, to the presence of representative German-Americans at the second annual meeting of the American Association for the Advancement of Physical Education, in Brooklyn November 26, 1886, where for the first time the work of the North American *Turnerbund* was brought prominently before native American teachers, by descriptive and historical papers and by illustrative classes of men and children. Dr. Hartwell himself was elected treasurer of the Association at this meeting, and read a paper on "The Physiology of Exercise," not printed in the proceedings but later amplified and re-written and published in the *Boston Medical and Surgical Journal*

for March 31 and April 7, 1887 (vol. 116, pp. 297-302 and 321-324). As far back as September of 1884 Commissioner Eaton had introduced him to Hartvig Nissen, at the latter's Health Institute in Washington. Early in 1887 Mr. Nissen was invited to give a course of lessons in "Swedish free movements" and German apparatus exercises to Johns Hopkins students, and this instruction was continued in 1887-88, from November to the middle of April. From the following May until the end of August, 1889, Dr. Hartwell was in Europe on leave of absence, interested especially in the hygienic and medical application of exercise and with the thought of developing a practice in this specialty upon his return. The winter was spent in Stockholm, with almost daily visits to the Zander Institute and the Royal Gymnastic Central Institute. He went also to St. Petersburg, revisited Vienna, and received six weeks of instruction in Bonn. December 20, 1889, he read a paper on "Mechano-Therapy in Sweden and Germany" before the Clinical Society of Maryland, and repeated it in March before the Johns Hopkins Hospital Medical Society. In this connection attention may be called to the forty-five pages on General Exercise which he prepared for Vol. I. of Dr. H. A. Hare's *System of Practical Therapeutics* (Philadelphia, 1891), and to his translation, from the Swedish, of Dr. Emil Kleen's *Handbook of Massage* (Philadelphia, 1892).

Meanwhile he had been consulted in the preparation of plans for the Boston Conference of 1889, and an examination of the printed proceedings will show how conspicuous a part he played at the various sessions. The summer of 1890 was devoted to a third visit to Eu-

rope, this time to gather material relating to school gymnastics and playgrounds. The trip took him to England, France, Switzerland, parts of Austria and Germany, and again to Stockholm. June 24 the Boston school committee had voted to introduce the Ling or Swedish system of educational gymnastics into all the public schools, and on November 25 they elected him director of physical training. Still hoping to become eventually the head of an institution for mechanotherapy, he consented to inaugurate the work of the new department, and his resignation was therefore presented to the Johns Hopkins trustees, to take effect December 31.

A part of the story of the next seven years is contained in the series of reports dated 1891, December 31; 1894, June; 1895; 1896, March 15; and 1897, March 15. On September 1, 1897, he resigned to become secretary of the newly created Department of Municipal Statistics in Boston, a position which he still holds. The published proceedings of the American Association for the Advancement of Physical Education, from the sixth meeting (1891) onward, and the files of the *American Physical Education Review* reveal how great a service he rendered to physical training in the country at large, during these years and also after his direct connection with the work had ceased. In 1891-92 he was president of the Association, and again from 1895-99, and he was author of the plan of reorganization on the basis of local and district societies which was adopted in 1895. Chapter XII. (*Physical Training*) in the Report of the Commissioner of Education for 1897-98 (Washington, 1899), and chapter XVII. (*On Physical Training*) in that for 1903 (Washington, 1905), give

final expression to the results of his years of study and observation. The long series of reports and papers which began in 1885 constitute the most scholarly contribution hitherto made to the literature of physical training in English, and no man in America has done so much to win for physical training a position of dignity and recognized worth.

APPENDIX

1. No complete manual of the history of physical training has yet been written in English. *Dr. Hartwell's* reports contain summaries, and detailed treatment of certain periods, dealing especially with the earlier history in the United States. *Dr. Leonard*, the author of this volume, has published at intervals in the *American Physical Education Review* and *Mind and Body* "Chapters from the History of Physical Training" which now cover systematically the main periods from the time of the Greeks down to the present for Europe, and through the Dio Lewis period for the United States (references to individual chapters are given below). The first twelve biographical sketches in the present book contain some of the same material in condensed form, but the last eight are concerned with men whose work has been done since the Civil War or is still in progress.

In *German*, as general works of reference, one should possess Dr. Carl Euler's "Encyklopädisches Handbuch des gesamten Turnwesens" (Three large volumes. Leipsic and Vienna, A. Pichlers Witwe & Sohn), and Hirth-Gasch's "Das gesamte Turnwesen: Ein Lesebuch für deutsche Turner" (Four volumes. Hof. i. B., Rud. Lion). There are two excellent small handbooks, Angerstein-Kurth's "Geschichte der Leibesübungen in den Grundzügen" (Leipsic and Vienna, A. Pichlers Witwe & Sohn), and Rühl's "Entwicklungsgeschichte des Turnens" (Leipsic, Ed. Strauch). The standard large work is the Euler-Rossow "Geschichte des Turnunterrichts" (Gotha, E. F. Thienemann).

In the *Scandinavian* languages much the best treatment will be found in Viktor Heikel's "Gymnastikens Historia" (Issued in four parts, 1905-1909. Helsingfors, Waseniuska Bokhandeln). Briefer works are Illeris and Trap's "Grundtræk af Gymnastikkens Historie" (Copenhagen, C. A. Reitzel), and

the "Gymnastiken Historiskt Framst ld" of T. J. Hartelius (Stockholm, Albert Bonnier).

2. Leonard, in *American Physical Education Review* XII:225 (1907 September). E. N. Gardiner's "Greek Athletic Sports and Festivals" (New York, The Macmillan Co.) is a complete, scholarly, and recent treatment of that particular phase.

3. Leonard, in *American Physical Education Review* XII:234 (1907 September). Chapter 55 in Sienkiewicz's "Quo Vadis," and chapters 12-14 in book V of Wallace's "Ben Hur" contain graphic descriptions of the spectacles presented in the amphitheater and the circus.

4. Leonard, in *American Physical Education Review* XII:289 (1907 December). Consult Lecky, "History of European Morals" II:107-132, for details of the ascetic life. Tennyson's poem, "Saint Simeon Stylites," reveals the spiritual selfishness resulting from such a life.

5. Leonard, in *American Physical Education Review* XII:292 (1907 December).

6. Leonard, in *American Physical Education Review* XII:298 (1907 December).

7. Leonard, in *American Physical Education Review* XII:294 (1907 December).

8. Leonard, in *American Physical Education Review* XII:296 (1907 December). Chapters 8-12 in Scott's "Ivanhoe," and the whole book, for that matter, will be found interesting reading in this connection.

9. Leonard, in *American Physical Education Review* X:189 (1905 September).

10. Leonard, in *American Physical Education Review* X:284 (1905 December).

11. Leonard, in *American Physical Education Review* IX:89 (1904 June).

12. Leonard, in *American Physical Education Review* IX:92, 105 (1904 June), and *Mind and Body* XVII:321 (1911 January).

13. Leonard, in *American Physical Education Review* V:18 (1900 March) and X:1 (1905 March).

14. Leonard, in *American Physical Education Review* IX:97, 107 (1904 June).

15. Leonard, in *American Physical Education Review* IX:227 (1904 December). Consult Carl A. Westerblad's "Pehr Henrik Ling" (Stockholm, P. A. Norstedt & Söner), and articles by the same writer in *Tidskrift i Gymnastik* VI:561 (1907), VI:999 (1909), and VII:193 (1911). The second article in the *Tidskrift*, written in English, is issued separately in London by Sampson Low, Marston & Co., Ltd., under the title: "Ling, the Founder of Swedish Gymnastics: His Life, His Work, and His Importance."

16. Leonard, in *American Physical Education Review* IX:238, 242 (1904 December). For further particulars consult *Tidskrift i Gymnastik* VII:891 and 950 (1909).

17. Leonard, in *American Physical Education Review* IX:99, 108 (1904 June).

18. Leonard, in *American Physical Education Review* IX:102, 109 (1904 June).

19. Leonard, in *Mind and Body* XI:217 (1904 November). The centenary of the birth of Spiess called forth three small volumes in 1910: J. Bollinger-Auer's "Adolf Spiess, sein Leben und seine Wirksamkeit" (Basel, Helbing & Lichtenhahn), Dr. Karl Roller's "Adolf Spiess, ein Gedenkblatt . . ." (Berlin, Weidmann); and H. Schmeel's "Adolf Spiess, der Begründer des deutschen Schulturnens" (Giessen, Emil Roth).

20. Leonard, in *Mind and Body* XIII:257 (1906 November).

21. Leonard, in *Mind and Body* XII:193, 217, 249, 281, 313, 345 (1905 September-1906 February).

22. Leonard, in *Mind and Body* XIII:65, 97, 129 (1906 May-July).

23. Leonard, in *Mind and Body* XIII:289 (1906 December).

24. Leonard, in *American Physical Education Review* XV:617 (1910 December), and especially page 621.

25. Hartwell, "Physical Training in American Colleges and Universities" (Washington, Circular of Information of the Bureau of Education, 1885 No. 5).

26. His "Autobiographical Sketches of a Strength Seeker" were published in the *Atlantic Monthly* IX:102 (1862).

27. Leonard, in *American Physical Education Review* XI:83, 187 (1906 June and September).

28. Hartwell, *l. c.* under No. 25, pp. 101-105. An article on

the originator of the bill will be found in *The Outlook* for 1901 May, page 81.

29. Hartwell, *l. c.* under No. 25, page 41.

30. Mrs. McCurdy, in *American Physical Education Review* XIV:537, 624 (1909 November and December).

31. Proceedings of American Association for the Advancement of Physical Education IV:17 (1888) and VIII:34 (1893), and Report of Boston Conference (1889) page 99. Consult the Year Books of the Reformatory, especially the 16th, 17th, 18th, 20th, and 23rd.



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